UNIVERSITY OF LONDON THESIS

Degree PhD Year 2007 Name of Author COXELL, Adrian William

Non-Volitional sex in adult males

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Doctor of Philosophy

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2007

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I Adrian William Coxell, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

Background

Research on victims of sexual crime is highly gendered with much more research having been performed on females' experience of non-volitional sex (NVS) in adulthood. No previous study of NVS in adult males in England has investigated the prevalence and characteristics of NVS and its association with mental health and sexually abusive experiences in childhood.

Objective

There were five main objectives: 1) To obtain an estimate of the prevalence of NVS in a large sample of men attending general practice (GP) surgeries, and from a sample of men attending a genitourinary medicine (GUM) clinic; 2) To describe the characteristics of NVS; 3) To test for associations between NVS and mental health problems; and 4) To test for an association between child sexual abuse and NVS.

Design

Two cross sectional surveys using a computer-administered interview

Setting

Data were collected from men attending one GUM clinic in London, and from men attending eighteen GP surgeries in England.

Participants

Consecutive attendees aged eighteen or over were recruited from the GP surgeries (n=2474) and the GUM clinic (n = 224).

Results

The prevalence of non-volitional sex was approximately 3% in the GP sample and 18% in the GUM clinic sample. Data from the combined samples found that NVS was a marginally significant predictor of a lifetime history of self harm, and that child sexual abuse was a significant predictor of reporting non-volitional sex in adulthood

Conclusions

The rate of NVS in the GP sample was similar to that reported in other studies of NVS in adult men. The association between NVS and self harm is consistent with research which demonstrates mental health difficulties in men who report NVS. As with previous research, child sexual abuse predicted reporting NVS, suggesting that this association is robust.

Acknowledgments
I would like to thank Professor King in particular for all of his help and support. I would also like to thank Dr Gill Mezey for her support and also Ms Rosalind Lai for her highly valuable library skills. I would like to thank JB - thank you so much for all of your love and support.

Special thanks also to the participants who gave their time and support to this study.

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Introduction

> *'A social problem does not exist for a society unless it is recognised by that society to exist. In not being aware of a social problem, a society does not perceive it, address it, discuss it, or do anything about it. The problem is just not there ... The pages of history are replete with instances of dire social conditions unnoticed and unattended in the societies in which they occurred.' (Blumer, 1971)*

It could reasonably be argued that Blumer's statement applies to the phenomenon of Non-Volitional Sex (NVS[1]) experienced by adult males. For example, Tewksbury and Mustaine (2001) observed that, compared with the research on male victims of NVS, *'The research literature on sexual assaults of women ... is much more developed'.*

The relative dearth of 'epidemiological' research on male victims of NVS is powerfully demonstrated by an analysis of 120 studies of '... several categories of sexual coercion, including rape and attempted rape' involving over 100,000 participants (Spitzberg, 1999). The data demonstrate two obvious aspects of the literature:

1. The study of victims has concentrated on females (52 studies vs. 13 studies respectively)
2. The study of perpetrators has concentrated on males (11 studies vs. 1 study respectively)

In some ways Spitzberg's findings are understandable since official crime statistics (see for example, Bottomley and Pease, 1986) show that the majority of victims of sexual crime are female and the majority of perpetrators of sexual crime are male. It is important to realise, however, that this gender imbalance does not represent a *dichotomy*: males can be victims of sexual crime, and females can be perpetrators of sexual crime. Unfortunately, this was not recognised by researchers for some time:

> *'Failure of health care professionals to recognise the possibility that a man can be sexually assaulted has influenced research on the subject;*

[1] This term (from Kalmuss, 2004) will be used throughout this thesis to refer to experiences where adult men report being forced to take part in sexual activity against their will

there has been none. Two of the original Kinsey investigators were asked if they were aware of any male sexual-assault survivors in the Kinsey research population. They confirmed that there were none that they knew of but also stated ***that they had never asked a man if he had been sexually assaulted*** [bold added]. *Other authorities in the field of sex research were contacted, none of whom has ever included such a question in their surveys' Sarrell and Masters (1982)*

Actually, Sarrell and Master's (1982) were incorrect: research had been conducted on Prison samples (e.g., Davis, 1968; Lockwood, 1980) but Sarrell and Masters (and other sexologists) were presumably unaware of this. Actually, this lack of research into male victims of sexual crime was not restricted to adult males. Nielsen (1983) reports that up to 1980 the pronoun 'she' was used almost exclusively in research on male sexual assault survivors. Indeed, Spiegel (2003) has opined that:

... the vast majority of philosophical inquiry into, and the scientific investigation and clinical presentation of, sexual traumatisation and its repercussions has emerged from the male perpetrator/female victim paradigm'.

Thus, despite the fact that adult males have been victims of sexual violence throughout recorded history (Jones, 2000) it is clear that sexual violence perpetrated against adult males is a greatly under-researched area of inquiry. The obvious question is: Why is it that researchers have been 'slow' to research men's experience of NVS? One possibility is that researchers have subscribed to a societal myth (Gonsiorek, Bera and LeTourneau, 1994) that males (and perhaps adult men in particular) cannot/would not be sexually assaulted (i.e, 'it just does/would not happen'). Indeed, Stanko (1990) has argued that society's perception of a 'real man' is:

'....a strong heterosexual protector, capable of taking care of himself and, if necessary, guarding his and others' safety aggressively. He is the man who will stand up in a fight ...And, according to the mythology of the 'real man', he will do so fearlessly'

Thus, it seems possible that there was no perceived need to ask the question about the possibility of male victims of NVS (as such events were likely considered improbable or very rare)[2].Even where men are included in research on NVS, it could be argued that the reporting of such research perhaps shows evidence of bias towards findings related to women[3]. For example, a recent study of violence (physical and sexual) experienced by a random sample of approximately 8000 women and 8000 men in the USA conducted on behalf of the U.S. Department of Justice (Tjaden and Thoennes, 2000) is entitled 'Full report of the prevalence, incidence and consequences of violence against **women**' (my bold text), despite the fact that *half* the data collected are from male participants.

Irrespective if the gender of the victim it is obvious, however, that research on behavioural phenomena such as sexual crime is beset by a number of difficulties. First, it is clear that, unlike a physical attribute (e.g., height) events such as non-volitional sex are (at least to some extent) socially constructed and that the lack of a ('non fuzzy') concept of NVS (or many other socially constructed variables for that matter[4]) creates difficulties in conducting and interpreting research. The complexity of the construct of NVS is evident in the definition provided by Kalmuss (2004) who defined NVS as

> *'sexual behaviour that violates a persons right to choose when and with whom to have sex and what sexual behaviours to engage in'.*

It is obvious that such a definition would include a 'spectrum' of severity of such behaviours. Indeed, Kalmuus argues that

> *'The more extreme forms [of NVS] include rape, forced sex, child sexual abuse, sex trafficking and violence[5] against people with non-conventional sexual identities'*

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[2] In fairness, it is only relatively recently that research has been conducted into female perpetrators of sexual crime.

[3] The author only originally only consulted this document out of curiosity regarding the findings of such a large survey of women

[4] Famously, Wittgenstein was able to show that the concept of 'game' was notoriously difficult to define (e.g., both solitary fantasy play and tennis are (likely!) considered games, yet one involves (potentially) only one player and potentially no competitive element, while the other involves at least two players, a formal rule system (unlike fantasy play) and competition).

[5] While not stated explicitly, Kalmuss refers to *sexual* violence against persons with 'non-conventional' sexual identities.

Such behaviours do not capture the full extent of NVS, however. Kalmuss further argues that

> *More nuanced ...[NVS] ... include[s] engaging in sexual behaviour that masks ones non-conventional sexual identity, or that protects ones position with peers, or that represents a Quid Pro Quo for the economic support that one obtains within an intimate relationship'*

Kalmuss' definition clearly includes circumstances where 'consent' to engage in sexual activity is affected by societal/situational factors such as status inequality or economic dependence. Intrapersonal factors such as degree of intoxication (with alcohol or drugs) also present difficulties with respect to the capacity to give 'consent'. Thus, consent (i.e., the right *and capacity* to choose) is a complex construct and differing views about the capacity to give consent will impact upon research findings about NVS. For example, a measure specifically designed to assess rape in women includes items which if responded to in the affirmative meet the research, but not the legal definition of a sexual offence in the USA (Glylys and McNamara, 1996).

A further complexity is that definitions of certain sexual behaviours may change over time. For example before 1994, the crime of rape in England and Wales referred to penile penetration of the vagina, after 1994 it referred to penile penetration of the vagina and/or anus (making the crime of male rape possible), while after 2003 rape also included penile penetration of the mouth (of a male or female). A further complexity in research on NVS is that there is evidence that various colloquial terms (e.g., 'have sex') have very different meanings according to gender (Pitts and Rahman, 2001). This can obviously affect the findings of research which asks if a person has been 'forced' to 'have sex'.

Thus, those researching NVS are faced with a number of difficulties: 1) There is a wide spectrum of behaviours/events of differing severity that could be labelled as nonvolitional; 2) No formal definition/spectrum of such severity exists; 3) Consent is a complex construct and the capacity to give consent is likely affected by various social/situational and intrapersonal factors; 4) Definitions of sexual crimes change over time; 5) Various sexual terms (though widely used) may mean different things to different people.

Further, it seems clear that this spectrum of NVS also involves a spectrum of 'coercion'. For example, first intercourse (or other sexual behaviour for that matter) may result from 'Person A' engaging in sexual behaviour due to 'Person B' appealing to 'societal norms' about the age (or stage of relationship) at which such sexual contact may take place. Under such circumstances, there may be little 'explicit' sexual coercion from the Person B, but 'Person A' may feel (peer/societal) pressure (to appear 'normal') and engage in sexual activity and reluctantly assent to 'achieve a sexual milestone' (possibly only to have felt 'coerced' at a later stage)[6]. In addition to verbal behaviour (including blackmail), coercion may also involve the use of alcohol, drugs, and/or overt physical threat and/or harm to a person in order that they comply with the sexual wishes of another.

A further complicating factor in research on NVS is the 'implicit assumption' that the 'victim' will have found the coercive experience distressing and/or psychologically harmful. There is evidence, however, that even when feel that they have been coerced into sexual activity they do not always consider the event to have been distressing (Krahe et al, 2003; incidentally, there is also evidence that men who have experienced what researchers would define as child sexual abuse do not necessarily report that they found the experience negative (see Fromuth and Burkhart, 1987).

A variety of methodological issues also affect research findings on the nature and characteristics of NVS. While not discussed in detail here (see later) it is known that factors such as sample type and mode of inquiry affect the rate at which NVS is reported.

In short, NVS is a fuzzy concept because it potentially includes a wide variety of sexual behaviours and because integral to it is the fuzzy concept 'coercion' which also includes a wide variety of behaviours. Further, methodological issues affect the reporting of NVS. Thus, the task of a participant engaging in research on NVS is to first understand what the researcher is 'getting at', decide if any of their experiences is relevant to the topic of inquiry and then feel comfortable enough (e.g., feel certain that their responses are anonymous) to report the experience(s). Misunderstandings and/or

[6] This is not a trivial point as research shows that teenagers often regret having had sex 'too young' and, retrospectively, may also feel that they were in some way coerced into the behaviour

reticence on behalf of research participants will inevitably affect the prevalence of the experienced labelled by researchers as a form of NVS.

To be premature, construct/methodological criticisms pertinent to particular research on NVS will be briefly presented when presenting the findings of same. More substantive and/or general criticisms relating to the validity and generalisability of research findings of a number or 'types' of studies are presented later in a later section of the thesis.

In summary, it is not at all clear that extant research (e.g., prevalence estimates and NVS characteristics) refers to the rate/nature of 'isomorphic' events in different research studies. It is important that the reader is cognisant of this before previous findings on the prevalence and characteristics of NVS are presented later in this introduction.

Aims and hypotheses

Currently, research on male victims of NVS can be broadly divided into two categories:

- Prevalence research which ranges from simply inquiring about whether a person has experienced NVS through to research that also inquires about characteristics of the experience and any associated mental health problems
- Studies which provide information on the characteristics of NVS experienced by males conducted either on clinic (or police) samples or on persons volunteering to take part in studies of male rape advertised in the press

Little research has been conducted on male victims of NVS in Europe, however. Further, most large-scale research inquiring about men's experience of NVS has been conducted without obtaining much detail about the victims and perpetrators of these experiences or to whom these experiences are reported. Only a small number of studies have inquired about revictimisation (the relationship between sexually abusive experiences in childhood and in adulthood). It is also clear that only a small proportion of studies have used a mode of inquiry (i.e., computerised interviews) likely to lead to an increased rate of reporting of these experiences. Based on the findings of extant research (which is reviewed next) this thesis has the following aims:

- To provide an estimate of the prevalence of NVS (and the prevalence of childhood sexual abuse) in a large sample of English men using a computerised interview
- To provide information about the various characteristics of the NVS experience including data about perpetrators, coercive and sexual acts performed, injuries, help-seeking, disclosure to others and police involvement and legal processes.
- To obtain information about mental health problems and help-seeking for same

The research aims to test the following hypotheses:

- The prevalence rate of NVS reported by a large sample of men in England will be greater than 0% and lower than 7% (a rate reported in a large US epidemiological study)
- NVS and various forms of child sexual abuse (see method section for definition) will be significant predictors of mental health problems and help-seeking for same
- There will be a significant association between changes in sexuality and confusion about sexuality where NVS is perpetrated by a male
- There will be a significant association between reporting male sexual partners and reporting an experience of NVS and childhood sexual abuse
- There will be a significant association between reporting NVS perpetrated by a male and tonic immobility ('freezing') during NVS.
- Various forms of child sexual abuse (see method section for definitions), reporting of male sexual partners and younger age will be significant predictors of NVS
- Various forms of child sexual abuse (see method section for definitions), reporting of male sexual partners and younger age will be significant predictors of rape as defined by the Sexual offences Act (SOA) 2003.

Review of prevalence of NVS in men

Prevalence refers to the proportion of persons within a population who have a certain disease or have experienced a particular event (or both). Extant research on the prevalence of NVS in adulthood is reviewed below. This research has been conducted

on a number of different samples including community samples, patients attending a variety of medical clinics, students and incarcerated men. Some studies have focused solely on men who report having sexual relationships with men. Studies reviewed here were identified after searching MEDLINE, PsychINFO and EMBASE[7]. Bibliographies of identified journals were also searched and official statistics pertaining to sexual assault in the UK were obtained via Internet download from HMSO. Studies on patients with a specific medical or psychiatric diagnosis and men in various custodial environments[8] were excluded from the review. Research on men attending a variety of medical clinics for various reasons was included, however, as this research recruited participants from these settings.

Papers were included in the review only if it was possible to ascertain the age at which unwanted sexual experiences occurred. This review is concerned with NVS in adulthood only (although in practice adulthood varied from above 16 to above eighteen in different studies). Thus, studies of the lifetime experience of unwanted sexual experiences (e.g., Choi, Binson, Adelson and Catania, (1998)) were excluded. Also excluded were studies that considered unwanted sexual experiences in adolescence (where, for example, this included unwanted sexual experiences between the ages of fourteen and twenty-four years (e.g., Perkonigg, Kessler, Stortz and Wittchen, 2000), as the prevalence of NVS in adulthood (conceptualised as $\geq$ 16 years of age for legal purposes in the UK) could not be ascertained from these studies. A large, much quoted, USA study was excluded as it inquired about NVS since the age of *'... twelve or thirteen'* (Laumann, Gangnon, Michael and Michaels, 1994). Although Laumann et al's (1994) data were collected from a nationally representative sample a number of issues could have affected the prevalence rate of NVS. First, persons aged sixty or over were excluded and, as such, cohort effects may affect the prevalence estimate. Forced or coerced sex in adulthood was inquired about during an interview and defined as 'After puberty, that is, after you were age 12 or 13 years old, did a (OPPOSITE sex of participant) force you to do anything sexually that you did not want to do?'. An affirmative answer led to further questions regarding the nature of the experiences and the persons involved.

[7] See the method section for literature search terms.
[8] See Coxell and King (2002) for a recent review of data on NVS in custodial environments

Participants were also asked to complete a questionnaire in which they were asked 'Have you ever been forced by a man to do something sexual that you did not want to do?' Note that the first interview question seeks questions about sexual assault (in the case of a male study participant) perpetrated by a female. Further questioning follows only if the participant responds in the affirmative. Thus, a man who has only been sexually assaulted by a man would not report (at this stage) that they had been sexually assaulted. Note also, that male participants were not asked in the SRQ whether a woman had sexually assaulted them. Thus, it is possible that the prevalence estimates obtained may have underestimated actual rates due to difficulties participants may have experienced in reporting. In particular, a man who may have been too embarrassed to report sexual assault at interview by a female would not have had the opportunity to report this in the SRQ leading to a possible underestimate of this type of sexual assault.

Hierarchy of evidence regarding the prevalence of NVS

Prevalence rates are affected by a number of factors (see later in this introduction). One of the most important factors in any prevalence rate is the sample used in the study. Ideally, a research should reflect perfectly the population from which they are drawn in order that the external validity of the study is as high as possible (i.e., the results obtained from the sample can meaningfully be applied to the population from which the sample was drawn). Accordingly, the evidence regarding the prevalence of NVS is presented in the form of a hierarchy below. Large prevalence studies of NVS on representative samples are considered first, followed by other studies conducted on men residing in the community. Studies on the period prevalence of NVS are considered next.

Research on the prevalence of NVS was excluded from this review for a number of reasons. A frequent reason for excluding research was that it inquired only of lifetime experience and it was therefore impossible to know what proportion of unwanted sexual experiences occurred in childhood or adulthood. Research was also excluded due to sampling issues. The nature of, and reasons for, the exclusion of various samples from the review are provided below.

Student samples

There are a large number of studied on unwanted sexual experiences in college men, and the use of college students is common in sexological research. For example,

Wiederman and Hurd (1999) found that college students were the most common sample used in 'The Journal of Sex research'. Thus, Whitley (2002) has argued that

> *' ... it may be difficult to generalise much of the psychological research across subpopulations because of the predominance of White college students as research participants'*

Further, there are concerns about the external validity of research conducted on college students. With regard to research on male victims of NVS, the great majority of these studies are based on students in American universities, and it is known that only approximately half of the American population attends college (U.S. Bureau of statistics, 1999). Second, students are (on average) young people and it is known that college students in America are among the age group most at risk for being a victim of a sexual crime (Bureau of Justice Statistics, 2001). There are a number of other factors about research on college students that create external validity difficulties regarding the prevalence of NVS:

- Inquiring about samples of students not representative of the student population (e.g., McConaghy and Zamir (1995) concentrated only on medical students)
- Inquiring about lifetime, or where the age of experience of unwanted sex is not specified (e.g., Baier, Rosenzweig, and Whipple, 1991)
- Using scales to measure the experience of unwanted sex and reporting the mean and standard deviation only, rather than also reporting the proportion of experience whose score on the scale was zero or greater than zero (i.e., the prevalence rate could not be obtained). See, for example, Menard, Nagayama-Hall, Phung, Ghebrial and Martin (2003).
- Use of a single form of NVS (e.g., involving sexual intercourse only (Struckman-Johnson, 1988)).
- Inquiring *only* of NVS experienced while in dating relationships (Aizenman and Kelly, 1988;) or while on a 'date' (Struckman-Johnson, 1988)

Thus, research on the prevalence of NVS derived from college student samples was excluded from this review.

Men in the military

There have been a number of studies of NVS experienced by men in the U.S. military. As with research on students, the principal difficulty with such research is the issue of external validity. Research demonstrates that men in the military differ from the rest of the population in being less likely to be white and more likely to be from 'lower' socioeconomic backgrounds (Teachman, Call and Segal, 1993). Thus, men in the military are unlikely to be representative of the population from which they are drawn in terms of various epidemiological variables (i.e., ethnic group, socio-economic status, age). Research has also shown that lifetime rates of unwanted sex in Army personnel are higher than in those in the general population (Martin, Rosen, Durand, Knudson and Stretch, 2000). This is an important finding since it is known that CSA is associated with NVS (see later in this introduction).

Psychiatric patients

Research on psychiatric patients was excluded since it is known that lifetime experience of NVS is a predictor of mental health problems and contact with a mental health professional (Golding, Stein, Segal, Burnam and Sorenson, 1988). Further, research demonstrates high rates of lifetime unwanted sexual experiences in psychiatric patients. For example, Mueser, Salyers, Rosenberg, Goodman, Essock, Osher, Swartz, Butterfield et al (2004) inquired about unwanted sexual experiences in a large sample (male n = 461) of inpatients and outpatients drawn from five clinics in the USA (diagnoses were schizophrenia, schizoaffective disorder, or major mood disorder). Mueser et al reported the following rates of unwanted experiences in these patients (Table 1):

Table 1 *Rates of unwanted sexual experiences in male psychiatric patients (adapted from Mueser et al, 2004)*

Experience	**Prevalence n (%)**
CSA	134 (29)
NVS	113 (25)
NVS in past year	35 (8)
Lifetime (CSA and/or NVS)	183 (40)

To be premature it will later be seen that the rates of NVS, lifetime unwanted sex and NVS in the past year are much greater than rates obtained from community samples. In

fact, rates of NVS could be higher in Mueser et al's research, since the definition of NVS was '... oral, anal, or vaginal intercourse achieved through either physical force or threat'. Thus, the rate of NVS could be greater if a more liberal definition were employed (e.g., these men may have been forced into other acts, for example receiving fellatio, performing cunnilingus being masturbated or being forced to masturbate the perpetrator) which do not appear to be included in the definition of NVS.

Men with developmental disorders (learning disability)

Research on persons with learning disabilities (e.g., Turk and Brown (1993), Brown, Stein and Turk (1995)) has also been excluded from the review although it is known that persons with this diagnosis do experience NVS. As with psychiatric patients with non-developmental disorder diagnoses, it is clear that persons with a learning disability are not representative of the general population (in fact the IQ criteria (American Psychiatric Association, 1994) for such diagnoses means that the IQ of these persons is approximately two standard deviations below the mean, meaning that these persons are literally statistically different from the general population).

Homeless men

It seems likely that homeless persons are frequently excluded from prevalence research. Clearly, it is impossible to generalise findings from such a small and unrepresentative sample of persons to the general population. Research does show, however, that homeless men report experiencing NVS while 'on the street'. For example, Wenzel, Koegel and Gelberg (2000) conducted a study of the victimisation experiences (physical and sexual) of a probability sample (n=1159) of homeless men in Los Angeles County, USA. Wenzel et al (2000) found that 1% of these men responded in the affirmative to the question 'Have you been sexually assaulted in the last 30 days?' when questioned by an interviewer. Further, Kushel, Evans, Perry, Robertson and Moss (2003) report that 27 of 1959 homeless men (1.4%: numbers generated from per cent figures provided in the text) responded in the affirmative to the question 'In the past 12 months, did anyone force you to have sex with them?'. The rate of NVS in these men could be higher, however, as there is evidence that the predominant meaning of the term 'have sex' is vaginal intercourse between men and women (Pitts and Rahman, 2001; Randall and Byers, 2003). As such, other forms of forced sexual activity (e.g. fellatio, genital touch and even rape) may not have been reported as they may not have been considered legitimate targets of inquiry.

Incarcerated men

There is a growing literature on male victims of NVS in custodial environments. Prevalence studies were reviewed recently (see Coxell and King (2002). As with studies on students, soldiers and psychiatric patients it is clear that men who have experienced incarceration are not representative of the general population. Further, it is possible that NVS is more prevalent in custodial environments (see Coxell and King (2002) for a discussion of prevalence rates obtained from custodial samples).

Other samples excluded from prevalence research

Note that the above samples have been excluded from the review of NVS prevalence. Before reviewing the research on NVS in the community, it is important to point out that research - even if based on random probability samples - will likely frequently (if only 'implicitly') have excluded the following persons:

- Those whose only language is not one for which the researchers have prepared a survey or interview
- Homeless persons (although research on NVS experienced by homeless men has been conducted)
- Travelling persons
- Psychiatric and medical inpatients
- Military personnel unavailable to engage in the research due to duty requirements
- Persons whose cognitive ability precludes participation
- Incarcerated persons

Thus, it is probably fair to say that many prevalence studies could be described as studies of the prevalence of a disorder/experience in relatively easy to access persons who have the cognitive and/or language ability to participate in a given study. Further, most research on the prevalence of NVS in community samples will preclude a number of groups of persons, some of whom (e.g., homeless people, psychiatric inpatients) report high rates of NVS.

Research on community samples

Research on community samples[9] is presented below. Research on two samples of German men (Krahe, Scheinberger-Olwig and Bieneck, 2000) was excluded since the authors report that the first sample contained men under sixteen years of age and did not report whether the second sample also included men under age sixteen.

Also excluded was the research of Tjaden and Thoennes (2000) (see the section on NVS definition for a critical evaluation of their definition of rape). The research of Walby and Allen (2004) and McGee, Garavan, de Barra, Byrne and Conroy (2002) is presented in separate tables as these researchers present more complex data.

Thus far, the largest study to inquire about NVS (i.e., non-consensual sex after age 16) reported by men in the UK has included a representative sample of 9078 men conducted by the Home Office (the British Crime Survey: Walby and Allen, 2004; Table 2). This study is reported in a separate table to the rest of the community studies due to the multiplicity of definitions of NVS employed. The study was conducted on a men aged 16-59 years using a self-report computerised interview.

Table 2 *Men's reports of various forms of NVS in the British Crime Survey (adapted from Walby and Allen, 2004)*

Form of NVS	Prevalence rate
Sexual assault (including any attempts)	2.1%
Serious sexual assault (including any attempts)	0.5%
Serious sexual assault (excluding attempts)	0.3%
Rape (1994[10]) (including attempts)	0.4%
Rape (1994) (excluding attempts)	0.2%
Rape (2003[11]) (including attempts)	0.4%
Rape (2003) (excluding attempts)	0.2%
Assault by penetration (2003[12]) (including attempts)	0.2%
Assault by penetration (excluding attempts)	0.1%
Less serious sexual assault	1.8%

It is of note that the prevalence rates for the 1994 and 2003 definitions of rape do not differ despite the fact that the 2003 Act now includes forced fellatio ('oral rape'). It is

[9] The research of Krahe, Habil, Scheinberger-Olwig and Bieneck (2003) was not included here as it inquired only of NVS experienced with a woman.

[10] The legal definition of rape from 1994 was changed to penetration of the vagina or anus without consent

[11] The legal definition of rape from 2003 was changed to penetration of the mouth, vagina or anus without consent

[12] Penetration of the vagina or anus by an object or other body part without consent

also important to note that the prevalence of certain forms of NVS change when *attempted*

NVS is excluded. McGee et al (2002) obtained data regarding the experience of NVS (age 17 or older) using a telephone interview with a probability sample of 1529[13] men in Eire. The questions posed and the per cent (n) of men reporting each type of NVS experience are presented below. No man reported being raped (Table 3).

Table 2 *Per cent of men responding in the affirmative to inquiries about various forms of NVS at/after age 17 (adapted from McGee et al, 2002).*

Type of NVS	**Per cent**
Attempted forced sexual contact by another person	8%
Genital touch	7%
Forced to touch a man's genitals	1%
Forced to touch a woman's breasts/genitals	4%
Oral sex ('giving' and 'receiving')	< 1%
Anal rape	0%

Overall, McGee et al report that nearly one in ten men (9.7%) reported forced sexual contact at age seventeen or older with approximately one per cent of cases involving some form of penetration. Studies on community samples have been conducted in the USA, England and in Australia (Table 4).

Table 4 *Rates of NVS in community samples*

Author(s) and year	**Methodology and sample size**	**Findings and comments**
Plant et al (2005)	Face-to-face interview and/or Computer Administered Survey Interview (CASI) of 975 men (aged '18 to over 75 years') from '276 geographically	3.2% of men responded affirmatively to the inquiry 'Since age of 16 (16 or older) was there a time when someone forced you to have sexual activity that you did not really want?'

[13] Number generated from per cent given in the text.

Author(s) and year	Methodology and sample size	Findings and comments
	representative sampling points in England, Scotland and Wales'. The response rate was not reported.	
Elliot et al (2004)	Postal survey of random, nationally representative, sample of 941 men. Age range of total sample (including women) was 18-90 years: 65% response rate)	3.8% of men reported sexual contact after age eighteen because they were threatened or forced
Flett et al (2004)	Face to face interview with 536 men obtained via 'random selection of 150 census or enumeration districts from both New Zealand islands'. The sampling design 'allowed for the deliberate over sampling of Maori ancestry and rural-residing groups'	0.7% of men reported sexual assault in adulthood.
DeVisser et al (2003)	Computer assisted telephone interviews (CATI) completed by a representative sample of 9373 men aged 16-59 years in Australia. 69% response rate.	2.05%[14] of men responded affirmatively to the inquiry 'Have you ever been forced or frightened by a male or female into doing something sexually that you did not want to do?' and indicated this had happened after age 16.
Nelson, Heath, Madden, Cooper, Dinwiddle, Bucholz, Glowinski,	Structured telephone interview with 832 pairs of male twins from a young	Two men (0.1%) in the sample who had not experienced CSA reported

[14] Per cent calculated from data provided in the paper

Author(s) and year	Methodology and sample size	Findings and comments
McLaughlin, Dunne, Statham and Martin (2002)	(mean age 29.9 (SD 2.5)) Australian sample. (69% response rate)	being raped at or after age eighteen. Three men (3.3%) of men who reported CSA reported rape at or after age eighteen[15]. Overall 0.3% of men reported rape at or after age eighteen.
Stein et al (2000)	SRQ completed by 533 'older men' (mean age 74) (USA)	NVS reported by 5.4% of men (first experience before age 18 in 70% of cases)
Sorenson et al (1987)	Face to face interviews with 1481[16] men in Los Angeles (USA). Response rate not reported.	7.2% (n = 225) reported sexual assault after age 16

Summary of research on community samples

Walby and Allen's research has a number of strengths in that it is based on a large, representative sample and uses a mode of inquiry (i.e., a computerised interview) known to increase the reporting of sensitive material (see later in the introduction). The research excluded men older than age 59, however and this could affect the prevalence rate if NVS has become more or less prevalent over time (Flett et al found that men aged 60 or over were significantly less likely to report NVS than were younger men). Further, the BCS provides no data on the characteristics or associations with mental health problems in men who have experienced NVS.

McGee et al's (2002) data has a number of strengths including use of a probability sample and a good response rate. Further, McGee et al's research provides data on various characteristics of NVS experiences (and also child sexual abuse and revictimisation: see later in this introduction). McGee et al report that the rate of NVS

[15] Numbers generated from % figures provided in the text
[16] N calculated from percentages given in the text

(penetrative and non-penetrative) is greater in younger men indicating that '.... An increasing proportion of adult ... men in Ireland report experiencing events they construe as sexual violence'.

McGee et al's (2002) data were, however, collected only from those households with a telephone. McGee et al point out that only 86% of households in Ireland have a telephone, leaving 14% of households excluded from their research. McGee et al did use random digit dialling, however, which has the advantage of not excluding those who are ex-directory.

Plant et al's (2005) data were collected from a large, representative sample but the prevalence rate could be affected by the methodology employed. Plant et al report that most data were obtained via face-to-face interviews with data on sensitive questions (Plant et al were not specific about which questions in there research were considered sensitive, however) being obtained via computer-administered interview. However, it appears that there may have been some inconsistency in modes used to collect the data as Plant et al report that participants could choose to either report on sensitive questions in a face-to-face interview or by using the computer. Thus, some data relating to sensitive issues (which may have included questions about NVS or CSA) may be affected by mode effects (see later in this introduction) and this may have affected the prevalence estimate.

The prevalence rate obtained by Flett et al (2004) may have been affected by the over-sampling of Maori and rural-dwelling persons. Further, the data were collected by face to face interview and men who had experienced NVS may have been reluctant to disclose the experience to another (research shows that few men have disclosed experiencing NVS to other persons: Mezey and King, 1989; Golding, Siegel, Sorenson, Burnam and Stein, 1989).

DeVisser et al's (2003) research was conducted on a large, representative sample of men. The use of telephone interviewing may have lead to more disclosure than face to face interviews employed in other research. As with other studies, (e.g., Walby and Allen (2004), the study only included men aged less than sixty years and this may have affected the prevalence rate obtained.

Nelson et al's (2002) data indicate fairly low rates of rape at or after age eighteen, but their sample is highly selective (twins), includes only rape rather than other forms of coerced/forced sexual activity and also excludes incidents between ages sixteen and eighteen. Nelson et al used a telephone interview (see difficulties relating to sampling from those with telephones discussed above).

Elliot et al (2004) obtained their sample from a stratified random sample of registered owners of a car and/or a telephone (see difficulties relating to sampling from those with telephones discussed above). Finally, it should be noted that the definition of adult NVS in this study included events since age eighteen. This is two years older than the definition of an adult with regard to consent to engage in sexual behaviour in England

Sorenson et al's (1987) data were also collected from one, large, urban area (Los Angeles) and are, therefore, not representative of the population of the USA. Further, Sorenson et al (1987) also used face to face interviews and this may have lead to reduced reporting of NVS experiences.

Period prevalence studies

The period prevalence studies in Table 5 are all concerned with NVS experienced in the last year[17].

Table 5 *Period prevalence studies of NVS*

Author (year)	Method	Prevalence
Schafer et al (2002)	Face to face interview with members of *heterosexual couples in* a multi-stage probability design conducted the 48 contiguous states of the USA. Black and Hispanic couples were over-sampled.	0.2% of men reported 'forced sex' perpetrated by their female partner in the lat year.
Feehan et al (2001)	Face to face interview with 233 twenty one year old men from a birth cohort born in Dunedin New Zealand. Data from 62% of the possible sample of 482 men engaged in a longitudinal study.	5.2% of men reported an assault with a 'sexual component'

[17] As before, the data from Tjaden and Thoennes (2000) were excluded as their period prevalence/incidence data included both actual and attempted rape.

Author (year)	Method	Prevalence
Norris (1992)	Face to face interviews with 500 men from four South Eastern cities in the USA.	0.6% responded in the affirmative to the inquiry ('Did anyone ever make you have sex by using force or threatening to harm you? This includes any type of unwanted sexual activity'). This included events in the last twelve months.

All of the studies in table 5 used face to face interviews, and only one study was based on a national sample. The rate of NVS obtained by Feehan et al (2001) was much larger than that obtained by either Norris (1992) or Schafer et al (2001). This may be due to the fact the experiences in Feehan et al (2001) were those that had a 'sexual component' defined as sexual contact or intention of sexual contact'. Thus, this rate seems likely to have included attempted NVS experiences. Further, it is clear that the 'intention' of sexual contact is open to interpretation by research participants. Feehan et al's (2001) prevalence rate may be higher than the other studies since it may include a wider variety of perpetrators than Schafer et al (2002) (which included only NVS perpetrated by a female partner) and a wider variety of sexual experiences. For example, Norris et al asked if men had been forced to 'have sex' and, as stated before, it appears that the predominant understanding of the meaning of this term is heterosexual vaginal intercourse (with only approximately 80% considering penile – anal intercourse, and approximately 35-40% considering oral-genital contact as having sex: Pitts and Rahman, 2001). As such, participants in Norris' (1992) study who had experienced other forms of NVS may not have reported them due to the nature of the question posed. The low rate of 'forced sex' in Schafer et al's (2002) study may be attributable to participants construing the term to mean sexual intercourse and may therefore have excluded other forced sexual acts.

Data obtained from medical patients

This section presents data from Emergency Department, General Practice (GP) and GUM clinics. Data from these sources are presented as they form the sources for the two samples used in this research. As with studies on psychiatric patients, research on rates of NVS in patients with a particular medical diagnosis was excluded as persons with a given medical diagnosis are, almost by definition, not representative of the population.

Emergency Departments

A number of papers have been published describing data from these sources. These studies could not provide evidence for the prevalence of NVS as they described either single case studies of NVS (Josephson, 1979); Wiwanitkit, 2005), or conflated data regarding both victims of CSA and NVS (Doan and Levy, 1983; Riggs, Houry, Long, Markovchik and Feldhaus, 2000).

General practice

Mol, Dinant, Vilters-van-Montfort, Metsemakers, van den Akker, Arntz and Knotterus (2002) used a postal questionnaire (50% response rate) to obtain data about 'adult sexual abuse' from 1289 men registered with one of 47 general practitioners in Holland. Only one man (1%) reported experiencing NVS.

Mezey, King and MacClintock (1998) obtained questionnaire data from 57 male consecutive attendees at a London GP surgery. One man reported experiencing NVS in the past year.

Thus, General Practice samples (either by post or completing the questionnaire during their visit) have been used to identify rates NVS experienced by GP practice patients.

Genitourinary medicine (GUM)

A number of studies conducted in GUM clinics were excluded because they did not describe the age at which participants experienced sexual violence (or provided data indicating that men who had experienced CSA were included in the sample: Medhikani, Kiemle, and Ahmad, 2005; Rogstad and Dale, 2004; Rogstad and Bignell, 1990). Further, all of these studies were reviews of case data and where men had reported either child sexual abuse (CSA) and/or NVS rather than prevalence studies of NVS (i.e., men attending such clinics for help may not have disclosed experiencing NVS to treating clinicians, but may have done so in an anonymous survey).

Much research conducted in GUM clinics has sampled men who have sex with men (MSM) only. These data are reported together with other studies that concentrate solely on men who have sex with men. Two UK studies have investigated the prevalence of NVS in GUM clinics (Table 6).

Table 6 *Prevalence of NVS in GUM samples*

Author(s) and year	Methodology and sample size	Findings and comments
Keane et al (1995)	Self-report questionnaire completed by 150 patients.	Ten men (7%) reported a history of sexual assault since the age of 16.
Petrak et al (1994)	Self-report questionnaire completed by 142 men (UK)	11% (n= 15) of men reported a history of sexual assault after age 18

Keane et al (1995) found that three of the ten men who had experienced sexual assault after the age of sixteen had also been sexually abused before age sixteen. Petrak et al (1995) do not state the definition that they used, but did report that one of their participants experienced sexual assault below the age of eighteen (the number and % figure provided in Table 6 excludes this case).

Prevalence data from individual GUM clinics is, of course, unrepresentative as only a small proportion of persons have ever had a sexually transmitted infection (STI)[18] (Fenton, Mercer, Johnson, Btron, McManus, Erens, Copas, Nanchalal, MacDowell and Wellings, 2005). As such, it is possible that the prevalence of NVS in GUM attendees is greater than that in the general population since these experiences are associated with behaviours that may in turn be associated with the need for intervention from a GUM service. There are data that show that the prevalence of CSA is greater in adult females attending a sexual and reproductive heath clinic than in a random sample of women (both samples from Australia: Dunne, 2002). Both samples were quite large (Clinic n= 401; population sample 710), both used identical questions regarding CSA experience and mode of inquiry, and participation rates were similar in both studies (clinic 65%; population 60%). The data demonstrate higher rates of coercive experiences in the clinic sample (Table 7).

[18] It is accepted that persons may attend GUM clinics for reasons other (e.g., sexual dysfunction) than help with an STI, however.

Table 7 *CSA experiences in women attending a sexual and reproductive health clinic and from a national random sample (adapted from Dunne, 2002).*

The perpetrator ...	**Clinic sample (%, n)**	**Random sample (%, n)**	**Odds ratio (95% CI)**
Touched victim's breasts / genitals	21 (84)	8 (57)	3.0 (2.1-4.4)
Made victim touch his genitals	9 (36)	2 (14)	4.9 (2.6-9.2)
Attempted to rape victim	9 (36)	3 (21)	3.2 (1.8-5.6)
Raped victim	4 (16)	2 (14)	2.1 (0.9-4.3)

With the exception of rape other sexually abusive acts were significantly more common in the GUM clinic sample[19]. Although these data should be interpreted with caution (since a national sample of women was compared with a sample from a single GUM clinic (rather than a national GUM clinic sample vs. a national population sample), there does seem some evidence that rates of sexually abusive experiences (at least CSA) are likely to be greater in GUM clinics than in the general population. Currently, there are no studies that have used the same definition and mode of inquiry comparing data from male GUM clinic attendees and males in the general population.

Research concentrating on men who have sex with men

A number of large-scale studies have been conducted on men who report male sexual partners[20]. The research of Balsam, Rothblum and Beuchaine (2005) is presented separately as the data are more complex than data from other studies. Balsam et al compared the NVS[21] histories of MSM (recruited via adverts in Gay press) and their heterosexual brothers. Responses to questionnaire inquiry found that rates of four forms of NVS were higher in MSM (Table 8).

[19] Numbers's and OR's were calculated using the percent figures provided by Dunne

[20] The research of Hickson, Davies, Hunt, Weatherburn, McManus, and Coxon (1994) conducted in England and Wales was excluded as it inquired about lifetime experience of unwanted sex.

[21] Adulthood defined as >=18

Table 8 *Reports of NVS by heterosexual, bisexual and homosexual men (adapted from Balsam et al, 2005)*

NVS variable	Heterosexual sibling	Bisexual men	Homosexual men
Coerced non-intercourse	12.6%	44.7%	28.4%
Coerced intercourse	9.3%	39.5%	20.6%
Attempted rape	2.2%	15.8%	15.1%
Completed rape	1.6%	13.2%	11.6%

Balsam et al's (2005) data need to be interpreted with some caution as the samples were quite small and because it is clear that the men recruited into the study are not representative of the general population (i.e., the men were recruited by gay men who responded to advertisements and then nominated a sibling to take part in the study). First, the proportion of men with a sibling is quite small (as few men report having sex with men). Second, the proportion of men who read the Gay press is unknown. Finally, the response rate in the study was quite low (response rate of 54%[22]). There have been a number of large-scale (n > 1000) studies focusing exclusively on men who have sex with men, one of these explicitly investigating 'hate crime[23]' victimisation (see Herek et al, 1999:[24] Table 9).

Table 9 *Research on the prevalence of NVS in men who have sex with men*

Author(s) and year	Methodology and sample size	Findings and comments
Greenwood, Relf, Huang, Pollack, Canchola, and Catania (2002)	Telephone interviews with 2311 men identified via 'disproportionate' and 'adaptive' sampling[25] from four cities in the USA	110 men (4.8%) aged >= 30 reported experiencing 'being forced to have sex'[26] ***in the last five years***.

[22] The study also included female participants, and combined male and female response rates are reported only

[23] Hate or bias crimes are crimes motivated by racism or homophobia

[24] Hickson et al's study of 930 gay men in the UK was excluded as it inquired about lifetime experience (28%) of unwanted sexual experiences. The study of 358 MSM conducted by Ratner et al was excluded as it included unwanted sexual experiences since the age of 14 (14%).

[25] Disproportionate refers to over-sampling from areas with a high density of MSM. Adaptive means using information obtained via disproportionate sampling to include/exclude other areas later in the study

[26] The number and per cent of men were calculated from per cent figures provided in the text. The study also included men aged 18-29, for whom the prevalence rate of forced sex was 6.1%. These men were

Author(s) and year	Methodology and sample size	Findings and comments
Kalichman, Benotsch, Rompa, Gore-Felton, Austin, Luke, DiFonzo, Buckles, Kyomugisha and Simpson (2001)	Questionnaires completed by 595 men attending a Gay Pride event in the USA.	20% responded in the affirmative to inquiries about various definitions of NVS since age 16[27]
Paul, Catania, Pollack and Stall (2001)	Telephone interviews with a probability sample of 2881 'urban' MSM	14.7% reported that they had been 'forced or frightened by someone into doing something sexually (sic) ... that you did not want to do' since age 18
Krahe, Scheinberger-Olwig and Kolpin (2000).	Questionnaires completed by 310 homosexual men recruited from '... a variety of public places including social clubs, different gay events, youth centres etc.'	17% reported 'moderate victimisation / aggression' and 28% reported 'severe victimisation / aggression'[28]
Herek et al (1999)	Questionnaires completed by 1089 gay and bisexual men recruited from community events, cafes, clubs etc frequented by Gay and bisexual men, community organisations, notices and advertisements and personal networks of study participants (USA)	Bias crimes: 4% of Gay and 7% of bisexual men reported ever being victims of sexual assault. Non-bias crimes: 2% of Gay and 5% of bisexual men reported ever being victims of sexual assault
Herek et al (1997)	Questionnaires completed by 71 gay and bisexual men (USA)	1% reported sexual assault within the last year and 14% reported sexual assault since age 16 (both rates based on reports of victimisation based on sexual orientation)

excluded from the data presented in table 9 because the researchers inquired about unwanted sex in the last five years and this could have included experiences under age 16.

[27] 'Have you ever had sexual intercourse (anal intercourse) even though you didn't want to because a man threatened to leave you?'; 'Have you ever had sexual intercourse even though you didn't want to because a man threatened to use physical force against you?'; 'Has a man ever forced or pressured you to have sexual intercourse when you did not want to?'

[28] Moderate victimisation/aggression was defined as 'attempted sexual acts through use of force or exploitation of victim's incapacitated state; completed acts through use of force or verbal pressure'. Severe victimisation/aggression was defined as 'completed sexual acts through use of force or exploitation of victim's incapacitated state'.

Author(s) and year	Methodology and sample size	Findings and comments
Doll, Joy, Bartholow, Harrison, Bolan, Douglas, Saltzman, Moss and Delgado (1992)	Interviews with 1001 gay and bisexual men aged 18 and over attending GUM clinics (USA)	Twenty-two men reported events characterised as sexual abuse between the ages of 16 and 18 (2.2% of sample[29])

Samples, modes of inquiry and definitions of NVS vary, but prevalence rates of NVS in adulthood from the studies listed in table 9 are high in comparison with data from the community studies presented above. The data seem to suggest that NVS is more common in men since rates of reported NVS are higher than the data from community samples (which will likely only contain a small proportion of men who have sex with men). More direct evidence that NVS is more common in men who have sex with men comes from Balsam et al's (2005) research and from a large representative which found that when compared with heterosexual men, gay (OR 4.9; 95% CI 2.9-8.4) and bisexual (OR 6.3; 95% CI 3-13) men are more likely to report a lifetime experience of unwanted sex[30] (deVisser et al, 2003). It is important to note, however, that the increased rate of reporting of NVS in men who have sex with men may also be an artefact of such men being more likely to report NVS (at least that perpetrated by a man) than are heterosexual men. This is an important area for further inquiry.

Summary of research on the prevalence of NVS

Research on the prevalence of NVS is characterised by heterogeneity of the definition of NVS, samples used and mode of inquiry. It is unsurprising, therefore, that NVS rates vary widely. There seems good evidence, however, that NVS is more common in men who report having male sexual partners.

Characteristics of NVS experienced by men

> *Given the paucity of studies evaluating sexual assault in men, questions remain regarding the prevalence, characteristics, and impacts among this demographic group in the general population (Elliott et al, 2004).*

[29] The study was concerned with CSA, with a child being defined as a person under 18 years of age

[30] Incidentally, it is also the case that lesbian (OR 2; 95% CI1.1-3.8) and bisexual women (OR 3.7; 95% CI 2.3-5.9) are also more likely to report a lifetime history of unwanted sex (deVisser et al, 2003)

A further goal of this thesis is to obtain information on the characteristics of NVS reported by a large community sample of British men. There have been a number of papers on the characteristics of these experiences, including:

- File review data from clinical sources (e.g., Myers, 1989; Sarrell and Masters, 1982; Groth and Burgess (1980)
- Case study research from persons responding to press advertisements for volunteers to take part in studies of NVS in adulthood (see Mezey and King, 1989; Walker et al 2005)
- Case study research from various clinical sources including GUM and mental health clinics (e.g., Hillman et al, 1990; Lacey and Roberts, 1991)
- Analysis of Police data based on the accounts of men who report their NVS experience (see Hodge and Canter, 1998)
- Small-scale prevalence studies of men attending GUM clinics (Petrak et al, 1994; Keane et al, 1995)
- Data from epidemiological research (Sorenson et al, 1987)

A number of studies that provided information about NVS characteristics were excluded because they presented aggregate data for males and females or from men who experienced CSA or NVS, or where the age of unwanted sexual experience was not mentioned (e.g. Huckle, 1995; Riggs et al, 2000; Stermac, Del Bove and Addison, 2004). Data were included from single case studies, or those in which characteristics regarding NVS could be separated from cases involving CSA (e.g., Rogstad and Bignell, 1990).

Evidence regarding the characteristics of NVS

It seems clear that men who present to clinics for help after experiencing NVS (i.e., file review, case series data) are likely to have experienced more serious forms of NVS compared with NVS victims who are identified using survey methods. Accordingly, data regarding the characteristics of NVS in men who have gone for help are presented first, followed by data from survey research. As with the data on prevalence, these studies are briefly introduced and general criticisms made. Subsequent to this, various characteristics of NVS experienced by men in adulthood are outlined and also critiqued. Publications on case reviews of men who have experienced NVS have been

provided from sources such as clinicians' caseloads, and reviews of medical and police records (Table 10).

Table 10 *Research providing information about the characteristics of NVS*

Author and year	Description of study
Wiwanitkit (2005)	Single case study of a man attending and emergency department after being raped.
Walker, Archer and Davies (2005).	Quantitative and qualitative data collected from forty rape victims who responded to advertisements in the press or GUM clinics
Stermac et al (2004)	Quantitative review of case records (n = 145) at a sexual assault referral centre
Kimerling et al (2002)	Quantitative comparison of case records of 128 male and 842 female sexual assault victims who attended a hospital-based rape treatment centre
Pesola, Westfal, and Kiffner (1999)	Case record review study of 27 cases of sexual assault (n= 24 men) reported and treated at an emergency department.
Hodge and Canter (1998)	Comparison of sexual assault behaviours of homosexual and heterosexual perpetrators from self (n = 83) and police report (n= 36) data
Isely and Gehrenbeck-Shim (1997)	Case record data from 172 agencies supplying data on a total of 3635 men who sought treatment after sexual assault in adulthood
King and Woollett (1997)	Quantitative review of 46 case records of sexually assaulted men who attended an organisation that provides help to sexually assaulted men
Stermac et al (1996)	Quantitative and qualitative review of case records of 29 male victims of sexual assault attending a sexual assault crisis unit
Hillman et al (1991)	Quantitative review of case records of 28 male victims of sexual assault attending a GUM clinic
Lacey and Roberts (1991)	Quantitative review of case records of 13 male victims of sexual assault attending a GUM clinic
Rogstad and Bignell (1990)	Case review of men attending a GUM clinic during 1989 who reported 'penetrative assault'. Eight men reported NVS.
Hillman et al (1990)	Qualitative review of case records of 5 male victims of sexual assault attending a GUM clinic
Myers (1989)	Qualitative review of author's case records of 13 men sexually assaulted either by males or females
Kaszniak et al (1988)	Single case study of a man with psychogenic amnesia post rape
Goyer and Eddleman (1984)	Qualitative review of authors' case records of 13 men sexually assaulted while serving in the US military
Forman (1982)	Quantitative review of reports of 12 male victims who provided data to a law enforcement agency
Sarrell and Masters (1982)	Qualitative review of 7 men sexually molested by women in adulthood
Kaufman et al (1980)	Quantitative comparison of 14 male and 100 randomly selected female rape victims treated in a hospital emergency room
Groth and Burgess (1980)	Qualitative review of clinical material of six cases of men who identified themselves as victims of rape

Author and year	Description of study
Josephson (1979)	Single case report of victim of a gang attack in a prison

While the studies in table 10 provide important and useful information based on victims' accounts it is also clear that these studies face a number of potential ecological validity problems since they are unlikely to present data on the full range of NVS experiences in the community. This may be so for a number of reasons:

- Case study data are based only on those persons who attend clinics and disclose their experiences. These persons may not be representative of persons who have experienced sexual assault.
- The data in some of these studies may not have been collected in a systematic manner[31] (as is the case with planned research) and this can result in 'missing' data points which may lead to incorrect assumptions about the absolute or relative frequencies of certain aspects of the victim or the NVS experience.
- Data from men attending specialist clinics cannot provide information about the prevalence of various characteristics of NVS in the community in general.

Thus, it seems likely that data from studies of men attending clinics are not representative of the NVS experiences of men from a community sample (some of whom may have attended a clinic).

Sexuality of male victims of NVS

A number of small scale studies on a variety of samples have found that a large proportion of men in their samples report having sex with men. For example, Hillman et al's (1991) UK study of men attending a GUM clinic found that, of those men providing information on their sexuality, 53% of NVS victims were homosexual and 18% bisexual. Similarly, Kimerling et al's (2002) (USA) study of male patients at a rape crisis centre found that 51% were homosexual and 11% bisexual. King and Woollett's review of data from a service that provided help to male victims of NVS found that 20% of those who experienced NVS were homosexual and 7% bisexual. Finally, in studies of men recruited for research into NVS via advertisements (in the press/GUM clinics) Mezey and King found that 45% of their sample were homosexual and 18% bisexual, while Walker et al found that 53% of their sample was homosexual

[31] For example, a number of studies are based on retrospective reviews of file data.

and 10% bisexual. Thus, data from small samples are consistent with high rates of NVS in MSM.

Isely and Gehrembek-Shim's analysis of 1062 cases of men attending support services found that the majority of victims were heterosexual (81%). Further Petrak et al (1994) found no association between sexuality and NVS history (although numbers were small).

In summary, the majority of evidence suggests that MSM are more likely to report NVS (no study found the reverse). No data regarding this association have been reported from an English community sample, however.

NVS as first experience of sex with another person

It is known that some victims have not experienced consenting sexual activity before experiencing NVS (Rogstad and Bignell, 1990), although there are little research data regarding this. Isely and Gehrembeck-Shim (1997) present no data on NVS as a first sexual experience with another and no community study has reported on this either.

Age at which men experience NVS

Data from studies of victims report that the mean age of victims of NVS is nearly always below thirty (Mezey et al, 26.3 years (range 16-82); Lacey and Roberts, 21.6 years; Goyer and Eddleman 20.6 years; Hillman (1990) 21.7 years; Kimerling et al (2002) 30 years), Stermac et al (2004): 27 years, Stermac et al, (1996) 27 years. A number of studies reported the age at which NVS occurred in age bands rather than providing summary statistics. The majority of men in Hillman et al (1991) and Walker et al's studies were aged less than thirty at the time of experiencing NVS (93% and 80% respectively), while Petrak et al found that 66% of their victims of NVS were aged less than forty at the time. The difficulty with these small-scale studies is that it is not at all clear that men attending clinics (or responding to press advertisements) are reporting on their *first* experience of NVS, however.

Data were available on age from 1625 cases in Isely and Gehrembek-Shim's sample. NVS was more common in younger men (16-21: 59%; 22-30: 37%; 31-40: 10%; 41-50: 3%; 51+: 1%), with 86% of cases occurring before age 30.

Data from surveys also suggest that NVS is more common in younger men. For example, Keane et al's survey of GUM attendees found that that mean age of victims was 21.2 years (range 16-33). Stein et al (2000) found that most NVS occurred before age 1. Sorenson et al (1987) found a higher prevalence of NVS in younger (18-39 vs. 40+) white men (when compared with Hispanic men). Greenwood et al (2002) found that the prevalence of NVS experienced in the last five years in their sample of MSM was greater in younger men (30-39 years: 6.1%; 40-49 years: 2.8%; 50-59 years: 3.8%; 60+ years: 1.4%). These data do not provide information on the mean age at which men *first* experience NVS, however. McGee et al (2002) found that NVS was more likely to be reported by younger men, suggesting that it is becoming more prevalent in younger men in Ireland.

In summary it seems the evidence suggests that NVS is more common in younger men, although the mean age at which British men in the community first experience NVS is not known.

Number of NVS experiences in adulthood

A number of studies of victims have found evidence for men reporting more than one experience of NVS in adulthood (e.g., Myers, 1989; Pesola et al 1999), although Isely and Gehrembek-Shim (1997) do not provide data on the number of times men attending specialist agencies had experienced NVS.

Keane et al's (1995) study of GUM attendees found that 2 of 9 men who provided relevant information reported more than one experience of NVS. McGee et al (2002) found that 76% of men in their sample reported only one experience of NVS at or since age seventeen (with approximately 4.5% reporting ten or more experiences). McGee et al (2002) found that 40% of men reporting more than one episode of NVS reported that these experiences occurred over a year or more.

In summary, there is evidence from small scale studies of victims and survey research that adult men may experience NVS more than once. The number of NVS experiences in men living in the community in England is not known at present. Clearly it is important to inquire about multiple experiences of NVS as (for example) this could provide important data on those most at risk. Further, respondents seem to consider this information important also as Petrak et al (1995) found when they report that

respondents wrote comments on their questionnaire pointing out that the questions only assumed one incident of sexual assault.

Number of perpetrators involved

A number of studies of victims report cases of NVS involving more than one perpetrator (e.g., Goyer and Eddleman, 1984; Groth and Burgess, 1980; Hillman (series); Kaszniak, 1988; Lacey and Roberts, 1991; Walker et al, 2005) including studies of men attending clinics where rates of NVS involving more than one perpetrator of nearly 50% have been reported (e.g., Stermac et al (1996) 44%; Kimerling et al (2002) 28%; Lacey and Roberts (1991) 23%).

In a UK study of rapes reported to the police, Hodge and Canter (1998) analysed data from self-report (83 victim reports) and police records (n = 36) regarding various aspects of reported sexual assaults and found that 34% of cases were categorised as gang (> 1 perpetrator) assaults. Further, there is evidence that large numbers of perpetrators have perpetrated NVS at any one time (e.g. as many as eight (Hillman et al, 1990) and twelve (King and Woollett, 1989)), including NVS perpetrated by groups of women alone (e.g., Myers, 1989), or groups of perpetrators involving men and women (e.g., Sarrell and Masters, 1982; Stermac et al, 1996).

Isely and Gehrembek-Shim's (1997) analysis of data from 1977 cases of NVS found just over forty per cent of cases involved more than one perpetrator (with nearly ten per cent involving four or more perpetrators. Currently, no large British survey has presented data on the number of perpetrators involved in NVS perpetrated against adult men. It is clear, however, that it is necessary to inquire not only about the number of perpetrators involved, but also about the gender of perpetrators involved.

Perpetrator gender

A number of small-scale studies have reported on NVS perpetrated by women on non-student samples of (e.g., Sarrell and Masters, 1982; Myers, 1989). Isely and Gehrembek-Shim (1997) found that only 6.3% of men reported being coerced by a female. Neither survey research in GUM clinics (Keane et al, 1995 Petrak et al (1994), nor the community (Sorenson et al, 1989; McGee 2002) always present data on perpetrator gender. Balsam et al (2005) found good evidence for female perpetration of coerced non-intercourse, coerced intercourse, attempted and completed rape (with rates

of female perpetration according to victim sexuality – heterosexual / bisexual / homosexual – ranging from 0% to 96%. Importantly, Balsam et al (2005) also found significantly different proportions of male and female perpetrators according to the sexuality of the victim for all of the adult NVS experiences (e.g., 82% of heterosexual men reported female perpetration of 'coerced intercourse', with only 40% of gay and 13% of bisexual men reporting such perpetration by a female. Although these data may not seem particularly surprising (men being more likely to experience NVS with the gender of usual sexual partner), Balsam et al (2005) also found that gay and bisexual men were more likely to report CSA perpetrated by a man (gay (96%); bisexual (80%); heterosexual (61%)).

To summarise, there is good evidence that women are reported as perpetrators of NVS, but also that the rate of female perpetration varies according to the sexuality of the victim.

Perpetrators of coercive sex against men – sexuality of male perpetrators

Evidence from studies of victims regarding the sexuality of male perpetrators is somewhat contradictory. For example, Walker et al (2005) found that the majority of rape perpetrators in their study were known or perceived to be gay or bisexual (43% and 13% respectively). Similarly, Mezey and King found that in cases where the sexuality of the perpetrator was 'clear' (17/22) the majority of perpetrators were gay (65%) or bisexual (18%). Conversely, Hillman et al (1990) found that (in cases where the victim knew the perpetrator) the majority of perpetrators were reported to be heterosexual (68%). Similarly, research on men reporting their NVS experience to the police found that sexual assault of men by strangers is significantly more likely to be perpetrated by heterosexual men and that sixty-six per cent of all gang assaults were perpetrated by heterosexual men (Hodge and Canter, 1998).

Isely and Gehrembek-Shim's analysis of data from 1107 men found that the majority of perpetrators were heterosexual (89.5%) followed by homosexual (8%) and then bisexual (2.5%) men (perpetrator sexuality was reported by the victim).

No large survey has reported on the known/perceived sexuality of male perpetrators.

Perpetrator identity

Reports from victims in small-scale studies suggest that a wide variety of persons perpetrate sexual assault against adult males, including:

- Strangers (e.g., Groth and Burgess, 1980; Hillman, 1990, Stermac et al, 2004; Walker et al, 2005)
- Intimate partners (i.e., current or ex lover, sexual partner or spouse [e.g., Ball, 1993; Kimerling et al, 2002; Mezey and King, 1989; Walker et al, 2005])
- Friends (e.g., Keane et al, 1995; King and Woollett, 1997)
- Work colleague (e.g., Goyer and Eddleman, 1984)
- Relatives (e.g., King and Woollett, 1997; Myers, 1989; Walker et al, 2005)
- Persons in a position of trust or official capacity including priests (Mezey and King, 1989); counsellors, probation officers, teachers (King and Woollett, 1997)
- Acquaintances (e.g., Groth and Burgess, 1980)

Isely and Gehrembek-Shim (1997) provide data (n= 1977) only on whether the victim was a stranger (32%) or an acquaintance of the victim. It is obvious that the category acquaintance could include any (all) of the perpetrators found in the small-scale studies outlines above.

Sorenson et al's (1987) epidemiological study found that the majority of both male (49%) and female (58%) perpetrators were an acquaintance of the victim. A greater proportion of male perpetrators were strangers to the victims, however (male strangers 39%, female strangers 7%). As with the small-scale studies a wide variety of perpetrators were identified including strangers, acquaintances, friends, relatives, intimate partners (spouse/lover), employer and teacher. McGee et al (2002) do not present data broken down by perpetrator gender. McGee et al (2002) found, however, that nearly one third of perpetrators were strangers with approximately one fifth being a 'friend' and one fifth being an acquaintance known for more than 24 hours. It is clear, then, that a wide variety of persons have been reported as perpetrating sexual assault against adult men.

Use of alcohol/drugs by the victim at the time of experiencing NVS

Studies of victims of NVS report use of alcohol by victims at the time of experiencing NVS. For example, Hillman et al (1990) , Kaufman et al, (1980), and Sarrell and Masters (1982) describe cases where men had been drinking alcohol before their experiencing sexual assault. Hillman et al's study of 28 sexual assault victims attending a GUM clinic found that 8 of these men had been drinking alcohol before being sexually assaulted (2 drinking alone and 6 with the perpetrator(s)). Stermac et al's (2004) study of victims attending a sexual assault referral centre found that alcohol use by the victim was more common in men sexually assaulted by an acquaintance (57%) than by a stranger (31%).In a previous study Stermac et al (1996) found that 46% of victims had been using alcohol at the time of the assault (18% had been using drugs). Alcohol use before sexual assault was reported by 8 of 22 men in their sample of sexual assault victims. Mezey and King report, however, that alcohol use appeared to be an important factor in only one of these cases.

Isely and Gehrembek-Shim report that a large proportion of men (39.9%) reported being sexually assaulted while 'intoxicated' (it is not clear if this refers to intoxication by alcohol only, however).

McGee et al report that alcohol was involved in more than half (53%) of NVS experiences with the majority of these cases involving alcohol use by both parties (63%). In only a few cases had either the victim (1%) or both victim and perpetrator (3%) been using drugs, however (McGee et al, 2002).

Thus, there is evidence that drug and/or alcohol use may be implicated in NVS. Alcohol use is highly prevalent in society however and it may be that it is the degree of intoxication – rather than mere use - that is more important in alcohol (or drug) use as a causal factor in NVS.

Location of NVS experiences

Studies of victims have found that NVS has been reported as taking place in a variety of locations including:

- The victim's home (e.g., Hillman et al, 1990; Mezey and King 1989; Kimerling et al, 2002; Stermac et al, 2004; Walker et al, 2005)

- The perpetrators home (e.g., Hillman et al, 1990; Kimerling et al, 2002; Stermac et al, 2004; Walker et al, 2005)
- Night shelters (e.g., Hillman et al, 1990)
- Outdoors (Hillman et al, 1990; Kaufman et al, 1980; Walker et al, 2005)
- In a vehicle (e.g., Kaszniak et al, 1988; Lacey and Roberts, 1991; Walker et al, 2005)
- In the workplace (King and Woollett, 1997)
- In military settings (i.e., on military bases, navy ships. See Goyer and Eddleman, 1984).
- In custodial settings (see Coxell and King, 2002 for a review; Wainiwitkit, 2005)

In all studies where data was provided on a variety of locations where assaults took place these were most common in either the victims or perpetrators home. Isely and Gehrembek-Shim's analysis of data from 1736 men found that the majority of NVS occurs in the victim's home (Table 11).

Table 11 *Location of sexual assaults perpetrated against 1736 (adapted from Isely and Gehrembeck-Shim, 1997).*

Location	Per cent
Victim's home	23
Other public area	16
Perpetrator's home	14
Other area	12
While walking	9
College campus	8
Car	7
Park	6
Public restroom	3
While hitchhiking	2
Bar	1

As with the small-scale studies, a large proportion (37%) of sexual assaults took place in either the victims or the perpetrator's home. McGee et al (2002) found that NVS was most likely to occur in a public place or outdoors, but with one fifth of NVS taking place in either the victim's or the perpetrator's home (Table 12).

Table 12 *Locations where men experienced NVS (adapted from McGee et al)*

Location of NVS	Per cent
Public place/outdoors	24%
Perpetrator's home	16%
Car/car park	12%
Work setting	7%
Hotel	7%
Victim's home	5%
School/college	4%

Perpetrator's use of verbal coercion, force or weapons

As mentioned earlier in the introduction coercion may involve a variety of forms of behaviour which varies in 'intensity' (i.e., there is a 'spectrum' of coercive behaviour). It is also important to recognise that coercion may involve subtle acts (or omissions) that imply a (potentially high) degree of threat. Two examples may suffice:

1) Man A may be at man B's house and be asked by man B if he wishes to engage in sexual activity. Man A may find it difficult to refuse if he notices that man B has a revolver on his coffee table. Would man A necessarily report in a survey of NVS that a perpetrator had 'used' a weapon against him, however? Clearly, this would depend on the precise wording of the question and man A's view about whether man B had actually threatened him with the weapon.

2) Man A is invited out for a drink by his manager the night before his annual appraisal at work and his manager makes a sexual advance. Man A may engage in the sexual behaviour fearing the consequences of failing to do so. Man A may then question the degree of coercion exhibited by his manager and also will obviously not know what would have happened if he had rebuffed the managers request.

Thus, it is clear that a very wide variety of behaviours could be considered coercive and depending on the questions about NVS, it may be very difficult for research participants to classify/report a particular behaviour as a form of 'coercion'. It seems reasonable to state that most questions inquiring about forms of coercion in research on NVS have asked fairly simple questions about coercive behaviours that do include the 'universe' of possible coercive behaviours (and item phrasing may also create interpretive difficulties for research participants).

Research indicates that perpetrators use a wide variety of coercive techniques to facilitate sexual assault against adult men. The small-scale studies found evidence for the use of the following techniques from threats of violence to the use of guns:

- Verbal coercion/intimidation (with rates as high as 42%: Stermac et al, 2004)
- Exploitation while the victim was asleep or intoxicated (with rates as high as 13%: Stermac et al, 2004)
- Holding down or restraining the victim in some way (with rates as high as 39%: Stermac et al, 2004)
- Use of physical force/violence (with rates as high as 62%: Hillman, et al 1990)
- Use or threat of use of a weapon (with rates as high as 45%: Hillman et al, 1990).

Isely and Gehrembek-Shim's (1997) analysis of data from men (n= 1977) presenting to clinics that provide help to male victims of sexual assault found that the use of threats to harm and use of physical force were used in more than half of the sexual assaults (68% and 60% respectively). Attacks on intoxicated victims (40% of cases) were much more common that attacks on 'unconscious' victims (4%). The reason for this lack of consciousness is not given and could therefore be due to the effects of physical force, intoxicating substances (or both), or attacks on a sleeping victim. A re-analysis (data from male respondents broken down by gender of perpetrator [Struckman-Johnson, 1991]) of Sorenson et al's (1987) epidemiological study data found that the use of verbal pressure alone was the most common form of pressure or force used in sexual assaults on male victims (Table 13).

Table 13 *Pressure or force used by male or female perpetrators and outcome of most recent sexual assault by perpetrator gender (adapted from Struckman-Johnson, 1991)*

Coercive strategy	**♂ Perpetrator (%)**	**♀ Perpetrator (%)**
Verbal pressure only	51	67
Harm or threat of harm only	15	6
Combination of verbal pressure and harm or threat of harm	35	27

A number of points need to be made regarding the data in table 13. First, the majority of men reported only verbal pressure from the perpetrator (which included persuasion, bribery or love withdrawal), it is important to realise, however, that Sorenson et al (1987) inquired about whether any one had ' ... ever tried to pressure or force you into sexual contact? By sexual contact I mean you touching their sexual parts, you touching their sexual parts, or sexual intercourse'. Thus, it is possible (as stated previously) that some of the experiences reported may represent attempts at sexual assault which may have not actually involved any sexual contact at all (i.e., they may represent 'failed' attempts at seduction or bribery intended to obtain sexual contact with the respondent). Second, the coercive strategy labelled 'harm or threat of harm only' is somewhat misleading as it actually includes (threats, the perpetrator 'scared victim because they were bigger or stronger', restraint, weapon present and got the victim drunk). The proportion of each of these subtypes is unknown. Given the data in table 13 above there seems some evidence that female perpetrators are less physically coercive than are male perpetrators. This may be due to the fact that (on average) women are physically less strong than are men. Note that this lack of physical strength could, paradoxically, mean that women may resort to more extreme forms of coercion (e.g., use of drugs/weapons) to subdue a male they intended to force into sexual behaviour.

Verbal threats and degrading comments toward the victim

A number of small-scale studies have reported that perpetrators have made verbal threats to victims of sexual assault. For example, Stermac et al (2004) report that verbal threats were made in 42% of sexual assaults by strangers and 37% of cases of sexual assault by acquaintances. Walker et al (2005) report that victims were threatened about telling others about the sexual assault (5% of cases), were taunted and insulted by onlookers (24% of cases), and that perpetrators made homophobic comments (5% of cases). Other small-scale research has found that perpetrators may threaten to kill victims (Groth and Burgess, 1980), say they will harm the victim in some way (e.g., threaten to break their limbs (Groth and Burgess, 1980)), or threaten to castrate them (Sarrell and Masters, 1982). It has also been reported that victims have been told that they will get HIV/AIDS from the sexual assault (Hillman, 1991).

Isely and Gehrembeck Shim (1997) report that physical threat was reported in 68% of cases where data was available (n= 1905). Sorenson et al have reported on various forms of verbal coercion, but the proportion of cases where verbal *threat* (or insult) was

made is unknown. Struckman-Johnson's (1991) reanalysis of Sorenson et al's (1987) data show that both male and female perpetrators threaten harm to the victim although the specific nature of such threats is not known. In summary, research demonstrates that perpetrators insult victims and threaten them with physical harm and even death.

Victim's fear that they may be killed during NVS

The data presented on the types of coercion and injuries obtained during sexual assaults indicate that sexual assaults on men can involve a high degree of violence and may involve the use of weapons including guns. Unsurprisingly, then, a number of studies have reported that victims feared for their lives when sexually assaulted (e.g., 67% of victims in Hillman et al, 1991; 55% of victims in Mezey and King, 1989; 52% of victims in Hodge and Canter, 1998). Isely and Gehrembeck-Shim do not report on the proportion of men who feared for their life when sexually assaulted and no any epidemiological study has reported on this proportion either.

Victim's attempts to defend against the perpetrator(s)

Clinical case reports have found that men report 'freezing' during NVS (e.g., in Mezey and King's study only 8 of 22 men were able to offer any physical resistance). Walker et al found that 87% of their sample reported experiencing 'frozen fear, helplessness or submission' when being raped. Data from men's self report and from police records found that a high percentage of men (regardless of sexuality) experienced 'freezing' during sexual assault (Table 14).

Table 14 *Behaviour of male victims during NCS (adapted from Hodge and Canter, 1998)*

Victim behaviour	Heterosexual victim (%)	Homosexual victim (%)	Bisexual victim (%)
Froze	63	59	58
Physical resistance	21	22	25
Verbal resistance	16	19	17

Isely and Gehrembeck-Shim (1997) do not report on victim's attempts to defend themselves during NVS, and there are no epidemiological data on men 'freezing' during NVS. It seems likely that (all other things being equal) 'freezing' may be more common in NVS with male perpetrators since such situations may be perceived as more

shocking and distressing than NVS perpetrated by a female. For example, Mezey and King (1989) report that more than a third of men in their study demonstrated ' .... *helplessness and passive submission, engendered by an overwhelming sense of disbelief about being sexually assaulted'.*

Sexual acts performed

There have been a number of studies of victims that report on the sexual acts of perpetrators. It is important to recognise that reporting of various forms of sexual behaviour may be affected by participants' (mis)understanding of the terms used by researchers. For example, Catania, Gibson, Chitwood and Coates (1990) found that a woman taking part in research on AIDS believed that she understood the term 'anal sex'. On inquiry, however, it was discovered that she thought that this term referred to rear entry vaginal intercourse. This can lead to researchers using 'colloquial' terms for sexual behaviours (e.g., 'blow job' for fellatio), but this is also problematic in that it is likely that not all persons will be familiar with such terms, and some may be offended (Tomlinson, 1998) and cease participation. Conversely, it seems likely that a proportion of the population is not familiar with various 'medical' terms for sexual behaviours and/or body parts (Tomlinson, 1998). Thus, it seems clear that it is likely that, depending on the terminology used, inaccurate reporting of sexual acts may occur. It may also be the case that a victim of NVS may feel more comfortable reporting certain acts rather than others even in a confidential survey (to be premature it is known that different survey modes elicit different rates of 'sensitive' behaviours – see later in the introduction). These caveats withstanding, previous research has found that:

- Rates of rape vary from approximately fifty per cent (Stermac et al, 2004) to nearly ninety per cent (Hillman et al, 1990)
- Rates of forced fellatio are as high as 30% (Petrak et al, 1995; Hillman et al, 1990).
- Rates of insertion of objects into the victim's rectum are low (3-5% depending on the perpetrator: Stermac et al, 2004; 2% King and Woollett, 1997).

Isely and Gehrembek-Shim's analysis of data from 172 agencies reporting on 1808 cases of male NVS found that anal intercourse was the most frequently reported behaviour performed by the perpetrator (Table 15), while the majority of victims were forced to commit fellatio (Table 16).

Table 15 *Acts performed by perpetrators (Adapted from Isely and Gehrembek-Shim, 1997)*

Act	% of cases (n = 1808)
Rape	71%
'Other' oral sexual acts	33%
Victim made to perform fellatio	23%
Other sexual acts (e.g., masturbated victim)	23%
Fondling	20%
Inserted object into victim's anus	7%

Table 16 *Acts performed by victims (Adapted from Isely and Gehrembek-Shim, 1997)*

Act	% of cases (n = 1686)
Fellatio	59%
Fondling	24%
'Other acts of oral sexual conduct'	20%
Anal intercourse	7%
Vaginal intercourse	6%

Half of the men who provided data in Keane et al (1995) and Petrak et al's (1994) GUM surveys reported rape. Petrak et al (1994) also reported that 31% of men reported forced oral sex and 25% of men reported digital penetration.

The characteristics of NVS experiences reported by McGee et al (2002) were presented earlier (Table 3). Struckman-Johnson (1991) re-analysed the data from Sorenson et al's 1987 paper on sexual assault of males in the community to describe the acts performed during NVS perpetrated either by males or females. Attempts at contact were the most frequent outcome (Table 17).

Table 17 *Reported acts performed during NVS by male participants in the Los Angeles Catchment Area study (Sorenson et al, 1989; reported in Struckman-Johnson, 1991*)*

Acts	Male perpetrator (%)	Female perpetrator (%)
Attempt at contact	42	27
Touched by perpetrator	32	25

Acts	Male perpetrator (%)	Female perpetrator (%)
Made to touch perpetrator	7	0
Intercourse (oral, anal, vaginal)	16	35
Multiple, including intercourse	4	13

* Participants reported all types of acts and therefore percentages may add to > 100

It is obvious that there is much disparity in the sexual acts in NVS reported in the research of Sorenson et al (1987) and McGee et al (2002) and that of Isely and Gehrembek-Shim (1997). This is likely due to a number of factors including the difference in male and female perpetrators in the two studies. Also, Isely and Gehrembek-Shim's (1997) study is based on clinic attendees who may have experienced more severe forms of NVS.

The data in Tables 15, 16 and 17 leave a number of questions unanswered. For example, rates of rape reported in various studies may be affected by the degree of respondents' familiarity with the term. It is possible that men may not have reported forced anal penetration by another man as rape if they construed the term to mean forced vaginal penetration of a female by a male. Further, it is interesting to consider how a man who was aware of changes in English law regarding rape may respond if he had been anally penetrated and forced to perform fellatio without his consent in, say, 1993, but was taking part in research at a later time (say, 2004). In such a case, would he report that he been raped as his experience would not have counted as rape in 1993, but would (in English law) have done so in 2004?

A further difficulty in considering the above statistics is the difficulty that it is not (generally) known if certain sexual acts are more commonly perpetrated by male or female offenders. Also, the relative 'density' of sexual acts is unknown (i.e., the frequency with which victims have to perform more than one type of act). It seems clear, however, that men report a variety of sexual acts experienced (or performed) during NVS and these vary from unwanted sexual touch to oral and/or anal rape.

Genital responses of victims

Adult male victims have reported experiencing erection and or ejaculation during NVS (Groth and Burgess, 1980; Myers, 1989; Mezey and King, 1989; Sarrell and Masters, 1982; Hillman, 1991; King and Woollett, 1997). Indeed, it has been reported that some

perpetrators explicitly attempt to make their victim ejaculate (Groth and Burgess, 1980). Isely and Gehrembeck-Shim (1997) do not report on the rate of such genital responses experienced by men during NVS, and no epidemiological study has reported on these responses. This is unfortunate since it is known that such genital responses result in confusion about sexuality and shamefulness in victims of NVS (Mezey and King, 1989). Given that such genital responses report in confusion about sexuality it seems reasonable to consider the possibility that such responses are also associated with changes in reported sexuality.

Physical injuries

Physical injury is common in victims attending services for help (35% of men in Kimerling et al's (2002) emergency department sample GUM sample, and 57% of Hillman et al's (1991) case series) . Physical injuries are also common in victims responding to press adverts for men to provide information about their experience of NVS (the 'majority' of victims in Walker et al's (2005) sample and 68% of victims in Mezey and King's (1989) research). Stermac et al (2004) found no significant difference in the rate of physical injuries in men experiencing NVS with a male stranger (43%), a male acquaintance (46%), or a female acquaintance (34%). A variety of types of injury have been reported, including:

- Bruises/cuts (e.g., Josephson, 1997; Stermac et al 1996:)
- Burns (Stermac et al, 1996; Walker et al, 2005)
- Head injury/concussion (Pesola et al, 1999; Kaszniak et al, 1988)
- Broken bone(s) (Walker et al, 2005)
- Internal injury (sometimes requiring colostomy: Hillman, 1990)
- Castration (Ball, 1993)

There is some evidence that homosexual victims of NVS may be more likely to incur injury. Hodge and Canter (1998) found that 89% of homosexual compared to 61% of heterosexual men '... sustained minor physical injuries'.

Isely and Gehrembeck-Shim (1997) do not report data on the proportion of men who experienced injury. Forty per cent of men in Petrak et al's (1995) GUM clinic survey reported being physically injured during NVS. No large community survey has presented data on injuries in male victims of NVS, however.

Help-seeking for physical injuries

Few studies provide data on help-seeking of NVS victims. Walker et al report that while the 'majority' of men in their sample (n=40) were physically injured, only fourteen sought medical help (thus, at most, only 67% (i.e., 14/21) of men who had been *raped* and injured in some way went for medical help. Mezey and King (1989) report that 68% of their sample of men reported an injury of some kind, but only one third of these men sought medical help. Petrak et al (1994) report that only 25% of men in their sample attended the GUM clinic as a result of experiencing NVS.

Time between experience of NVS and medical help

Research on victims shows that time to presentation for hep after experiencing NVS varies from less than one hour (Pesola et al, 1999) to months (Hillman, 1990), or more than a year (Rogstad and Bignell, 1990). Time to presentation is important for many reasons including the possibility of HIV transmission (post-exposure prophylaxis for HIV is not considered effective if administered more than 36 hours after potential exposure: Lurie, Miller, Hecht, Shesney and Lo, 1998). Even when men do present for help, they do not always inform medical staff that they have experienced NVS (Walker et al, 2005; Kaufman, 1980; Petrak et al, 1994). In contrast, however, Petrak et al (1995) report that all of the men in their study who went to the GUM clinic for help informed the doctor that they had experienced NVS, however.

There are very little data on men's reasons for not attending for medical examination after experiencing NVS. Aggregated data from men and women (from Petrak et al, 1994) on why victims of NVS did not attend for medical examination were as follows:

- Wish to forget (52%)
- No need for medical examination (46%)
- Fear of not being believed (11%)
- Fear of medical examination (4%)

Clearly, the proportions of men who endorsed each of the above reasons is not known, but the data do suggest some possible reasons why men may not disclose NVS to medical staff.

While the data on physical injuries and help-seeking available so far are important and useful it is also the case that they are limited to persons who actually present for help. Thus, the proportion of victims in the community who incur physical injuries during NVS experienced in adulthood (and who seek help for them) is currently unknown.

Acquisition of sexually transmitted disease(s) subsequent to experience of NVS

A literature search found no epidemiological research on the proportion of adult men who incur and obtain treatment for STDs after experiencing NVS (although Reynolds, Peipert and Collins (2000) review data on rates of STDs in female and adolescent victims of unwanted sex). It is known, however, that adult male victims of NVS have been found to acquire a variety of STDs including HIV (Hillman et al[1], 1990; Keane et al, 1995) and that perpetrators have been reported to have told victims that they would acquire HIV as a result of experiencing NVS (Hillman et al, 1991). Neither Isely and Gehrembeck-Shim (1997), nor any community study, presents any data on the proportion of men who obtained an STD during NVS.

Disclosure of NVS

Most of the small-scale studies were conducted on clinic samples and therefore victims had obviously disclosed. Walker et al (2005) found that the majority (88%) of victims in their sample had disclosed experiencing NVS before taking part in their study (with the time between NVS and disclosure varying between hours and twenty years). While not presenting numerical data, Mezey and King (1989) report that 'many subjects referred to the humiliation and stigma involved, often citing this as a barrier to disclosing the attack to others'.

A large epidemiological study in the USA has reported data on disclosure by men who have experienced either CSA or NVS (Golding, Siegel, Sorenson, Burnam and Stein, 1989). Logistic regression analyses of independent predictors of disclosure to a variety of sources found that *female* gender was a significant predictor of disclosure to the Police and physicians, and that assault by a stranger was a significant predictor of disclosure to anyone, friends/relatives, police, mental health professional and physician.

Univariable analyses of Golding et al's data[32] found that no man reported disclosing to a rape crisis centre or to a member of the legal profession, with only a small proportion

[32] Data not appropriate for multivariate testing

(3.2%) of men disclosing to a member of the clergy. The lack of a gender difference for disclosure of any unwanted sexual experience (CSA /NVS / both: males 57%, females 69%) suggests that men and women do not differ with respect to disclosure to various agencies. Golding et al's data analysis strategy is silent on differences in men's reporting rates of CSA and NVS and whether other variables (e.g., perpetrator gender) are related to disclosure, however.

McGee et al (2002) found that the majority of men in their sample first disclosed their NVS experience to the research interviewer. The most common reason for men's non-disclosure of these experiences to others were 'thought it was too trivial', 'felt ashamed/embarrassed', and 'did not want others to know'.

Reporting of NVS to the police and legal processes

Clinic research has found that large proportions of men report NVS to the police (Lacey and Roberts (1991) 38%; Kimerling et al (2002) , 49%; Pesola et al, (1999) 63% (of cases)). It is important to note here that these samples are from clinics that provide help to victims and that the NVS reported was presumably quite 'severe' since in Lacey and Roberts' case three men were actually brought to the clinic after making a police report. In contrast to these data Walker et al (2005) found that only five of the forty men (13%) in their sample reported being raped to the police. Mezey and King (1989) found that only two men in their sample (2/22; 9%) reported their experience of NVS to the police. The data suggest perhaps that those men who present to clinics subsequent to experiencing NVS are more likely to make a police report (as only 35% of men in Walker et al's study went for medical help after experiencing NVS).

Isely and Gehrembeck Shim (1997) found that only 535 of 3635 victims who attended agencies supporting those who have experienced NVS reported their experience to the police. British data also supports these findings of low rates of reporting to the police. Hillman et al (1990) found that only a small minority (12%) of men reported experiencing CSA/NVS to the police. Huckle (1995) also found that only 5 of the 22 rape victims in his study reported their experience to the police.

Two studies have provided data on men who have reported NVS to the police (in addition to that of Hodge and Canter (1998) which is silent on the prevalence of reporting). Pino and Maier (1999) analysed data obtained from the National Crime and

Victimisation Survey[33]. A logistic regression model performed on data from 81 male and 809 female victims found that males were less likely to report rape/attempted rape to the police[34] (OR 0.6). Even when men do report experiencing NVS to the police the chances of obtaining a conviction appear to be low. For example, a recent study (Lea, Lanvers and Shaw, 2003) of 379 rape cases reported (between 1996 and 2000) to a Constabulary in the South West of England found that only 5% of cases resulted in a conviction and that none of these cases involved the rape of a male.

In their community study, Golding et al (1989) found that only a very small proportion of men reported experiencing unwanted sex (CSA / NVS or both) to the police. Similarly, McGee et al (2002) found that only one man who experienced NVS reported it to the police. The most common reason for the non-reporting of NVS to the police for male victims was 'thought the case too trivial'[35].

The police are not always seen as helpful by men reporting NVS. Only one of the five men in Walker et al's (2005) sample who reported being raped to the police rated the police as '... responsive and helpful'. The other men are reported being raped to the police regretted their decision as they found the police homophobic, unsympathetic or disinterested. Golding et al (1989) also obtained data on the perceived helpfulness of those to whom victims had reported their NVS experience, with the police rated as helpful by only 38% of (male and female victims) victims.

Huckle[36] (1995) found that the victims of male rape gave a number of reasons for not disclosing their experience to the police:

- Not thinking that they would be believed
- That they would be considered as 'asking for it'
- Perceived homophobic attitude of the police
- Embarrassment

[33] This American survey is similar to the British Crime Survey. Persons aged 12 or over are interviewed in person or by telephone and questions are asked of victimisation experienced in the previous 6 months.
[34] After controlling for relation to perpetrator, whether items were stolen from the victim, weapon use by perpetrator, victim's income, victim's education level, injuries obtained and need for medical attention.
[35] The data are a little difficult to interpret, however, as only those who had not previously told anyone about experiencing NVS were then asked about why they had not informed the police.
[36] Huckle's data included examples of both CSA and NVS but are included as there is very little data on why men do not report NVS to the police.

- Could not face assailant in court
- Others would think that they were gay

Huckle (1995) presented no data on the proportions of men who gave such responses, however. Further, it is not clear whether only men who experienced rape in adulthood gave the above reasons for not reporting their NVS to the police. Petrak et al (1995) obtained data from male and female victims of NVS regarding disclosure to the police and found that:

- 56% did not report due to a wish to forget
- 33% did not report for fear of not being believed
- 28% did not report for fear of reactions from others
- 24% did not report because of 'knowledge of assailant', and
- 24% did not report for fear of appearing in court

Unfortunately, however, Petrak et al (1995) did not present their data separately for men and women. Case reports show that homosexual and bisexual men are reluctant to disclose NVS because they believe that the police may be unhelpful to them (West, 2002).

Given that few men report experiencing NVS to the police it is not surprising that there is little information about the experiences of victims at trial and the punishment handed down to guilty perpetrators. Lacey and Roberts (1991) report that in two cases the police had apprehended and charged the victim with one perpetrator being convicted and another awaiting trial.

Walker et al (2005) report a conviction in one case where the police had been informed (leading to a ten year sentence being handed down). Walker et al (2005) also report, however, that the victim felt that his court experience probably had a more adverse effect than the rape itself. Walker et al (2005) report that no charges were made in four other cases where the police were informed Mezey and King (1989) found that court proceedings followed in both cases where the police were informed, but that one man ' ... concealed his homosexuality despite being repeatedly challenged on this issue by

the police and the courts'. The relevance to the police and court of the man's sexuality to being forced into a sexual act(s) is difficult to explain.

Psychological difficulties and help-seeking for same

A variety of research methods have been used to identify the psychological and psychiatric problems experienced by men who have experienced NVS. One obvious problem with these studies is the assumption of the experience of NVS as the causal factor in the research participant's presentation. Such an interpretation may be particularly problematic if the participant has also experienced CSA and other forms of child abuse. Further, where a victim experiences a particularly violent NVS it is perhaps difficult to discriminate between the effects of the violent and sexual components of the ASA experience.

To be premature, it is clear that NVS may have a variety of effects on the psychological health of men who report these experiences. These effects include various psychiatric problems such as depression and anxiety, but also include other difficulties regarding disturbances of sexuality, anger, feelings of a loss of 'masculinity' and also disturbances of social function (e.g., isolation, difficulties in getting on with others). Crucial (unanswered) questions from the literature are:

- The ontological sequence of such difficulties. For example, do disturbances of sexuality and anger precede anxiety and depression?
- What mediates/moderates what?

In summary, it seems fair to state that male victims of NVS may experience a wide range of distressing symptoms, but, thus far, a 'fine grained' understanding of specific difficulties and their (potential) role in other (potentially) formal psychiatric problems is not well understood. These are not trivial questions as successful therapy would require 'targeting' the 'main drivers' of difficulties to ensure that (cognitive behavioural) therapy addresses not only affective problems, but the key cognitions/behaviours that precipitate and perpetuate distress.

Case studies/case series

The advantage of case studies/series is that they can provide information on difficulties that are, and are not, listed in formal diagnostic classifications such as DSM-IV and

ICD-10. These studies have reported the following difficulties experienced by male victims of SA.

- Meeting diagnostic criteria for Post Traumatic Stress Disorder (PTSD) (Huckle, 1995) or the presence of PTSD symptomatology (Mezey and King, 1989; Walker et al, 2005)
- Free-floating and rape-related anxiety (Goyer and Eddleman, 1984; Huckle, 1995, Mezey and King, 1989)
- Depressive symptomatology and suicidal ideation and behaviour (Goyer and Eddleman, 1984; Hillman et al, 1990)
- Decreased sense of self-esteem and emotional distancing (Mezey and King, 1989)
- Sexual difficulties including promiscuity, avoidance of sex, lowered libido, sexual dysfunction and reduced sexual pleasure (Groth and Burgess, 1980, Mezey and King, 1989, Huckle, 1995; Lacey and Roberts, 1991)
- Confusion about sexual orientation (e.g., Groth and Burgess, 1980; Huckle, 1995; Mezey and King, 1989; Lacey and Roberts, 1991)
- Problems with social relationships including feeling uncomfortable around/fear of men (e.g., Goyer and Eddleman, 1984)
- Anger, thoughts of revenge and even homicidal ideation (Goyer and Eddleman, 1984; Walker et al, 2005)
- Increased sense of vulnerability (Mezey and King, 1989)
- Social isolation (Hillman et al, 1990)

Symptoms in male rape victims responding to press advertisements to engage in research on male rape

Walker et al (2005) compared data from forty men who had experienced rape (recruited via press advertisement) and forty controls matched demographic and relationship status variables. Male rape victims scored significantly higher on all subscales of the General Health Questionnaire (somatic symptoms, anxiety and insomnia, social dysfunction and severe depression: Goldberg, 1978), and had significantly lower total and subscale scores (performance self-esteem; social self-esteem; and appearance self-esteem: State Self-Esteem Scale, (Heatherington and Polivny, 1991). Rape victim's scores on a measure of basic assumptions about the world in which they live (The

World Assumptions Scale: Janoff-Bulman, 1989) found differences on only one two of eight scales with victim's score on the luck and self-worth scales being significantly lower than those of controls. Walker et al also found that rape victims mean scores on a measure of intrusion (i.e., intrusive thoughts about rape) and avoidance (i.e., avoidance of thoughts about rape: Impact of Event Scale: Horowitz, Wilner and Alvarez, 1979) regarding their rape experiences were above a cut-off score indicative of high frequencies of experiencing of symptoms of intrusion and avoidance.

Walker et al's (2005) data indicate greater psychological difficulties in rape victims than in controls, but it is not clear that their data are generalizable to all male victims of rape (Walker et al, 2005). Further, the data only pertain to men who experienced rape and not to men who have experienced other forms of NVS.

Walker et al (2005) also obtained self-report data on a range of psychological and psychosocial problems experienced by men who responded to their advertisement. Depression was the most, and eating disorders, the least common difficulties reported after rape (Table 18):

Table 18 *Rates of psychological problems in forty male rape victims (from Walker et al, 2005)*

Psychological problem	**Per cent**
Depression	98
Fantasies about revenge and retaliation (95%)	95
Flashbacks re the assault	93
Anxiety	93
Loss of self-respect/ damaged self-image	90
Feeling more vulnerable	90
Emotional distancing from other people	85
Fear of being alone with another man/men	83
Guilt/self blame (e.g., for not being able to prevent NVS)	83
Increased anger/irritability	80
Low self-esteem	78
Intrusive thoughts about the rape	75
Withdrawal from friends/family	73
Impaired task performance	70
Sexual identity crisis	70
Damaged masculine identity	68
Increased use of tobacco	68
Abuse of alcohol	63
More security conscious	58

Psychological problem	Per cent
Suicidal ideation	55
Drug abuse	53
Deliberate self-harm (non-suicidal:)	50
Suicide attempt(s)	48
Eating disorder (e.g., bulimia nervosa)	28

These studies are helpful in understanding the range of difficulties experienced by male victims of NVS. The extent to which the difficulties reported are typical of men experiencing NVS is unclear since men in these studies have either volunteered to take part in a study on male NVS (Mezey and King, 1989; Walker et al, 2005) or have attended clinics for treatment (e.g., Goyer and Eddleman, 1984), however. It is possible, then, that these men represent victims who are most symptomatic and are not representative of male victims of NVS in general[37] (and perhaps victims of female perpetrators in particular). Further, interpretive difficulties with these studies include the lack of a comparison group to compare for the presence (e.g., meets a diagnostic criterion) or the severity of a particular problem (e.g., via the use of an Instrument such as the Trauma Symptom Inventory (see Elliot et al (2004) later in this section).

Large study of NVS victims presenting to helping agencies

Isely and Gehrembek-Shim (1997) obtained data on psychological symptoms in male victims of NVS from a variety of clinics that help these men. Depression was the most common disorder in NVS victims (Table 19):

Table 19 *Rates of psychological problems in victims of NVS attending clinics that support NVS victims (adapted from Isely and Gehrembeck-Shim (1997)*

Psychological problem	Per cent
Depression	92
Shame	89
Self-blame	89
Increased anger/rage	78
Flashbacks	69
Increased alcohol / drug use	68
Preoccupation with memories of assault	66
Guilt	66
Increased interpersonal problems	63

[37] For example, the men in Goyer and Eddlman's study were in the Military and part of their fear of men may have been due to the fact that they were sexually assaulted by other men in the military and were also required to spend a large degree of their time with other men in their occupational life

Psychological problem	Per cent
Fear of being perceived as gay	61
Nightmares	60
Social isolation	58
Disruption in family life	56
Sexual dysfunction	51
Suicidal ideation	46
Suicide attempt	35
Confusion regarding sexual identity	31

Isely and Gehrembeck-Shim's (1997) data show that victims may experience a wide range of difficulties. These data should be interpreted with caution, however. First, it seems clear that not all agencies will use formal diagnostic criteria and it cannot be stated with certainty, for example, that 92% of victims were clinically depressed. Second, the agencies themselves reported the data (rather than the data being collected by the authors) and it is possible that data reporting was not accurate. Third, some difficulties are vague (e.g., disruption in family life) and it is not clear that those providing the data will use identical (or even similar) criteria when rating the presence of such difficulties. Third, some items are very similar (e.g., shame, guilt, self-blame) and it is possible that these variables may measure very similar (if not identical) constructs. Fourth, some of the difficulties observed could be present *before* the victim experienced NVS. Fifth, by definition, information will only be provided in response to the variables in the questionnaire provided. Nonetheless, clinicians whose papers are listed in Table 19 report observing similar psychological problems in their victim samples.

Community samples

A number of large community studies have provided data on mental and physical health problems of victims of NVS. As with research on prevalence of NVSstudies that provided data on mental and physical health problems associated with lifetime experience of NVS (e.g., deVisser et al, 2003; McGee et al, 2002) or where the age cut-off for adulthood was below age sixteen (e.g., Ratner et al, 2003) were excluded. The only exception to this was the research of Burnam et al (1988) which inquired about lifetime experience of NVS, but which also conducted multivariate analyses to assess whether CSA was a better predictor of mental health problems than was NVS (Importantly, Burnam et al (1988) also present data which show that some disorders are also prevalent before sexually abusive experiences).

Plant et al (2004) performed a number of univariable analyses comparing differences between men who did and did not report experiencing NVS. Plant et al (2004) found that victims of NVS were not significantly more likely than those without such experience to have used alcohol in the last week, drink more alcohol on the last drinking occasion or have alcohol problems. Plant et al (2004) did find, however, that men with a history of NVS were significantly more likely to have smoked in the last week and to report use of illicit drugs.

In a separate paper Plant et al (2005) provide self-report data on mental and physical health and help-seeking for physical and psychological difficulties. Participants were asked for ratings of their mental and physical health (Excellent; very good; good; fair; and poor). Victims of NVS reported significantly poorer mental health than non-victims ($p < 0.005$), although differences in physical health were not significant. Victims of NVS were not more likely to report help-seeking for physical health problems, but the association between NVS and help-seeking for mental health problems was significant (28% vs. 9%; $p < 0.004$).

Plant et al's (2004; 2005) data are potentially problematic, however, since their univariable analyses could not control for potential confounders. For example, it is known that MSM are more likely to experience unwanted sex (deVisser et al, 2003) and it is also known that MSM have poorer mental health than heterosexual men (see the method section for a list of studies). Further, Plant et al (2004) did not control for other factors such as age[38], and occupational class that are known to be associated with help-seeking (Black, Morris, Smith, and Townsend, 1990; Jenkins et al, 2003).

Elliott et al (2004) compared scores of men and women who did and did not report NVS on a self-report measure of symptoms associated with traumatic experiences (the Trauma Symptom Inventory; TSI: Briere, 1995). Men with a reported history of NVS had significantly higher scores on all scales of the TSI than did men with no reported history of NVS (Table 20).

[38] For example, Elliott et al report that ANCOVA analyses found that younger research participants reported significantly more psychopathology on all ten scales of the TSI.

Table 20 *TSI scale scores in victims and non-victims of NVS (adapted from Elliott et al, 2004)*

TSI Scale	Did not report NVS (n = 447: M (SD))	Reported NVS (n = 18: M (SD))
Anxious arousal	5.4 (5.2)	12.1 (6.6.)
Depression	4.1 (5.0)	11.6 (7.4)
Anger/irritability	6.4 (5.6)	12.9 (6.2)
Intrusive experiences	3.7 (4.7)	10.7 (6.0)
Defensive avoidance	4.8 (5.8)	14.2 (7.1)
Dissociation	3.7 (4.1)	10.3 (6.1)
Sexual concerns	3.4 (4.5)	12.3 (7.4)
Dysfunctional sexual behaviour	1.7 (3.3)	8.7 (3.3)
Impaired self-reference	3.8 (4.7)	12.3 (8.0)
Tension reduction behaviour	1.9 (2.8)	7.1 (5.1)

While the data in table 20 seem to suggest that men who experience NVS are more symptomatic than men who do not report NVS the data could be somewhat misleading since nearly 60% of the men reporting NVS had also experienced CSA (Elliott et al, 2004). A subsequent analysis ensuring an equal proportion of CSA within comparison groups (male/female and NVS /no NVS) still found that those reporting a history of NVS had significantly higher symptoms levels on all scales of the TSI. This does not mean, however, that NVS experiences are more psychologically damaging than CSA experiences as they are also more recent than are CSA experiences. Indeed, Elliott et al (2004) investigated significant predictors of TSI factor (trauma, self, and dysphoria) scores in those reporting NVS and found that while frequency of ASA and penetration during NVS were not significant predictors of TSI factor scales, reporting of an NVS experience in the previous 12 months was a predictor of factor scores on the Trauma and Self factor scores of the TSI. Similarly, CSA was a significant predictor of all three TSI factor scores.

Elliott et al (2004) also found that male victims of NVS had significantly higher scores than female victims of NVS on all scales of the TSI (apart from anger/irritability). Elliott et al speculate that this may be '... because of the sex-role violation associated with sexual victimisation in society where men are expected to be strong, aggressive, and avoidant of any (even forced) sexual contact with other men (Briere, 1996)'.

Burnam et al. (1988) studied the effects of childhood and/or adulthood SA in men and women from an epidemiological survey of adults in Los Angeles. Lay interviewers trained to use the NIMH Diagnostic Interview Schedule (DIS: Robins *et al.*, 1981) identified disorders[39]. Univariable analyses found that a *lifetime* history of major depression, mania, dug abuse/dependence, phobia, panic disorder and obsessive compulsive disorder diagnoses were more common in persons (male and female) who reported a *lifetime* history of unwanted sexual experiences. The prevalence of disorders is not reported separately by gender, but analyses using the variables gender, age, education, ethnic group, and age at first assault were conducted to identify first onset of a number of psychiatric disorders. First onset of alcohol abuse/dependence after experiencing unwanted sex was more common in men. Gender was not a significant predictor of any other psychiatric disorders (depression, drug use/dependence, phobia, panic or obsessive compulsive disorder), but CSA experience was a significant predictor of depression, alcohol abuse/dependence and phobia.

Siegel, Golding, Stein, Burnam and Sorenson (1990) compared male and female victims of lifetime unwanted sexual experiences on a number of self-report variables related to psychological difficulties and behavioural avoidance. Participants were asked to 'Think about how being sexually pressured or forced affected your life. Did it ever cause you to?' Siegel et al (1990) did not compare men with and without a history of unwanted sexual experiences on these self-report variables, but the data they provide on victims self-reports reveal a variety of difficulties pertaining to CSA/NVS (or both)[40]. Being fearful of things not feared before was the most common psychological problem: Table 21).

Table 21 *Psychological problems in male victims of NVS (adapted from Siegel et al, 1990)*

Psychological problem	**Per cent**
Become fearful of people or situations that didn't used to frighten victim	16
Stop doing things that you did or stop going places that you went to before	15
Become afraid of having sexual relations	8

[39] Although the analyses were for lifetime experience of unwanted sex this study was included since multivariate analyses tested for the effects of CSA vs. ASA.

[40] Principal components analysis reduced the 15 items to a three-factor solution ('sexual distress', 'fear/anxiety', and 'depression'). Regression analyses using gender and a number of other demographic and assault-related factors found that female gender was a significant predictor of scores on the 'fear/anxiety' factor only', however.

Psychological problem	Per cent
Have less sexual interest	7
Feel dishonoured or spoiled	8
Feel guilty	20
Feel sad, blue, or depressed	26
Feel angry	29
Feel tense, nervous or anxious	35
Have trouble sleeping	23
Lose or increase your appetite	12
Become afraid of being alone	8
Alcohol/ drug use	6
Become afraid of anything else	2

Summary of psychological problems in victims of NVS

Data from the studies described in this section support the contention that NVS adversely affects mental health. There are a number of important interpretive issues, however. First the age at which an experience is described as occurring in adulthood varies. Second, clinical studies identify a broader range of difficulties than do epidemiological studies. This is likely because smaller clinical studies (e.g., Mezey and King, 1989) utilise smaller samples of participants and use a more qualitative (i.e., unstructured interview) methodology using an 'inductive' approach (i.e., such studies 'learn' about the presence of disorders rather than have a research protocol that prescribes which disorders are inquired about). Such an approach is useful since it is clear that published diagnostic classifications such as the DSM-IV (APA, 1994) do not describe the 'universe of human suffering' (e.g., many victims experience profound feelings of guilt, shame and anger which may greatly disturb psychological functioning, but which would not (necessarily) attract a diagnosis of mental disorder). Conversely, larger scale studies that use recognised diagnostic criteria (e.g., Sorenson et al, 1987) provide 'high quality' data via their use of standardised instruments that identify formal diagnoses. Critically, of course, these studies provide information only on the presence and not the severity of these disorders. A further difficulty in interpreting data on the association between unwanted sexual experiences and mental health is the obvious from viewing data provided by Burnam et al (1988: Table 22).

Table 22 *Mental disorders in persons with and without a history of unwanted sexual experience (matched on demographic variables: adapted from Burnam et al, 1988).*

Disorder	*Onset*	*Experienced unwanted sex*	*NOT experienced unwanted sex*
Major depression	After assault	13.4	5.6**
	Before assault	5.8	1.4**
Mania	After assault	1.93	0.23
	Before assault	0.69	0.23
Schizophrenia	After assault	1.16	0.00
	Before assault	0.93	0.23
Alcohol abuse/dependence	After assault	15.7	6.8**
	Before assault	4.9	2.8**
Drug abuse or dependence	After assault	18.4	7.5**
	Before assault	4.2	1.6**
Antisocial personality disorder	After assault	0.69	0.00
	Before assault	4.63	1.39*
Phobia	After assault	10.4	2.6**
	Before assault	11.6	6**
Panic disorder	After assault	2.8	0.7*
	Before assault	1.9	0.5
Obsessive-compulsive disorder	After assault	3.9	0.9**
	Before assault	1.6	0.5

The data demonstrate that disorders in persons with a history of sexually abusive experience may be present before their experience of NVS[41], although many of the disorders in table 22 were significantly more likely to be present *after* the CSA/NVS experience. Thus, in data from many studies it cannot be concluded that an association between a particular disorder and sexual assault represents a causal relationship (although it is possible that the disorder may be more severe after experiencing CSA/NVS).

Help-seeking for mental health problems

Differences in rates of attendance at mental health clinics between persons with and without a history of NVS are suggestive of differences in the mental health of these

[41] However, it is possible that the severity of the diagnosis increases after experiencing NVS.

groups. The data, suggest, however, that relatively few men present to 'official' (e.g., NHS services or private hospitals/clinics) mental health services. For example, Mezey and King found that only 13 of the 22 men in their sample sought medical help. Similarly a file analysis of cases presenting at an agency dedicated to assisting men with a history of NVS (SURVIVORS) found that only 21% of these men sought help from medical services (apart from contacting SURVIVORS: King and Woollett, 1997). Isely and Gehrembek-Shim's (1997) file analysis study found that only 705 of 3635 male victims of sexual assault sought medical help.

Golding et al (1988[42]) reported the largest community study of mental health service use by male victims of NVS. Univariable analyses found that men reporting CSA/NVS were no more likely to have used mental health services than men not reporting such a history (7 and 8% respectively). Golding et al did, however, find that a lifetime history of sexual assault was associated with significantly increased use of mental health service use after controlling for age, gender and ethnicity. There were no significant interactions between gender and any other variables and the use of health services.

Golding et al (1988) also found that enabling variables (i.e., private insurance and 'Medicaid') were not predictive of mental health service utilisation. Golding et al (1988) did not control for sexuality within their analyses, however, and this may be important since there is evidence that men who report a history of consenting same-sex activity have higher rates of mental disorders (see later in this thesis). Thus, it is important to control for this variable when trying to identify independent predictors of mental health service use.

Revictimisation

One aim of this thesis is to investigate the relationship between sexually abusive experiences in childhood and NVS. Small-scale studies (e.g., Keane et al, 1995; King and Wollett, 1997) show that (some) men who have experienced NVS also report CSA. Such 'revictimisation' is well documented in female victims of CSA (see Arata, 2002; Messman-Moore and Long, 2003 for reviews). A recent meta-analysis (Roodman and Clum, 2001) of studies of revictimisation identified 19 studies conducted on adult females, but only two studies conducted on adult males. Roodman and Clum (2001)

[42] Data from the Los Angeles Catchment Area Study

reported a moderate (0.59) effect size for revictimisation suggesting a definite effect for CSA on NVS risk. All published studies[43] investigating revictimisation in men report high rates of CSA in men reporting NVS and/or that CSA is significantly associated with/a significant predictor of NVS (Table 23).

Table 23 *Revictimisation rates in various studies of CSA and NVS*

Author	***Sample***	***Revictimisation rate***
Elliott et al (2004)	Stratified random sample of the (US) general population (65% response rate)	CSA+/NVS+ 59%; CSA-/NVS+ 12%
Desai, Arias, Thompson, and Basile (2002)	Computer assisted telephone interviews with 8000 men drawn by random digit dialling in '...the 50 states and the District of Columbia'. 69% response rate.	Significant odds ratios for CSA for NVS with any perpetrator (5.5), or a non intimate partner[44] (4.9). Significant odds ratios for CSA *and* child physical abuse for NVS with any perpetrator (6.1) or a non-intimate partner (4.7)
Nelson, Heath, Madden, Cooper, Dinwidie, Bucholz, Glowinski, McLaughlin, Dunne, Statham and martin, (2002)	832 pairs of male twins in Australia (69% response rate)	0.1% of men who did not report CSA reported adult *rape*, while 3.3% of men who reported CSA also reported adult *rape* (HR 27; 95% CI 4.4-162)
Paul et al (2001)	Computer aided telephone interviews with a probability sample of 2881 men who have sex with men in four US cities (San Francisco, New York, Los Angeles and Chicago)	Nearly equal proportions of men who experienced between one and five and more than five CSA experiences also reported NVS (both approximately 24%).
Kalichman et al (2001)	Questionnaires completed by men (n=595) a recruited from a Gay Pride event	CSA+/NVS+ 44%; CSA-/NVS+ 21% (OR 2.1; 95% CI 1.4-3.3[45])

[43] As with prevalence data the following research was excluded: 1) Studies on students (e.g., Stevenson and Gajarsky, 1991); 2) Studies where the (upper)age cutoff for CSA was lower than sixteen (e.g., Dilorio, Hartwell and Hansen, 2002); 3) Studies that did not differentiate between male and female victims (e.g., Steel and Herlitz, 2005); 4) Studies on psychiatric patients (e.g., VanDorn, Mustillo, Elbogen, Dorsey, Swanson, and Swartz, 2005; Braitstein, Tyndall, Spittal, O'Shaughnessy, Schilder, Johnston, Hogg and Schechter, 2003).

[44] Current and former spouses, current and former cohabiting partners, boyfriends and dates

[45] Calculated from n's in the text

While valuable, the research of Paul et al (2001) and Kalichman et al (2001) is concerned only with MSM and therefore it is difficult to know if the data are generalizable to all men. The research of Elliott et al (2004) and Desai et al (2002), however, are derived from representative samples and Desai et al's (2002) data shows small increases in odds ratios where participants report both childhood sexual abuse and child physical abuse thus stressing the importance of other variables as predictors of NVS. Indeed, Desai et al found that childhood physical abuse was also significantly associated with NVS with any perpetrator (OR 2.3), but not an intimate partner (OR 1.2; 95% CI 0.5-2.7: all odds ratios adjusted for age, race, education, employment and marital status). It is important to note, however, that Desai et al's definition also included attempted sexual acts (see later in this section) experienced in childhood or adulthood and, as such, the data do not strictly relate to sexual victimisation per se (since, by definition, an attempt is not an act - though still may be illegal). Further, it seems likely that the definition of 'attempted' in this area could refer to a wide range of behaviours.

Nelson et al's (2002) research is important in two respects. First, Nelson et al distinguished between CSA involving rape and what involving other sexual acts. Second, Nelson et al controlled for a large number of variables in their multivariate analyses (i.e., participant gender, maternal and paternal alcohol related problems, parental conflict, parental fighting, stepparent, neglect, and physical abuse). Nelson et al found that CSA involving intercourse (OR 9.9) was a significantly greater predictor of NVS than was CSA not involving intercourse (OR 3.3: all odds ratios adjusted for gender, maternal and paternal alcohol-related problems, parental conflict, parental fighting, stepparent, neglect and physical abuse).

McGee et al (2002) found that nearly one fifth (19.5%) of men in their sample who reported on CSA and NVS experiences reported both CSA and NVS. Further, McGee et al report that penetrative sexual abuse in childhood was '.... associated with a 16-fold increase in the risk of adult penetrative abuse, and at least a 12-fold increase in the risk of adult contact sexual abuse'.

Thus, there is good evidence that CSA in general, and penetrative CSA in particular, is a significant predictor of NVS in men and that child sexual abuse involving sexual intercourse is a more significant predictor than is CSA not involving intercourse. It is

important to note, however, that the legal definition of rape in England and Wales now includes non-consensual penile penetration of the mouth (Card, 2004) and would likely be considered a serious form of CSA by researchers, clinicians and the public. Nelson et al (2002) were neither able to assess the effect of such experiences on subsequent NVS alone or in combination with anal rape since they did not inquire about forced oral sexual contact with a male.

It is also important to note that definitions of CSA vary in different studies of revictimisation. For example, Desai et al's (2002) definition of both CSA and NVS were identical and stressed the use of force/coercion 'Respondents were classified as sexually victimised if they reported experiencing at least one type of sexual violence (e.g., forced to have sex by use of force or threats of harm to self or other; forced vaginal, anal or oral penetration; attempted oral, anal or vaginal penetration)'. Nelson et al's (multi-question) CSA definition, however, includes the item 'Before you were sixteen years old, were there sexual contacts between you and anyone other than a family member who was five or more years older than you were? By sexual contact I mean their touching your sexual parts, you touching their sexual parts or sexual intercourse'. To be premature (see the next section)) it seems likely that this item may include sexual behaviour between (with respect to this research) a boy (male <16 years old) and a female (or male) which the boy does not consider (either at the time, or subsequently) abusive. Indeed, Bolton et al (1989) have argued that society's view of such sexual contact between a boy and an older woman may be commonly perceived in society as '...an introduction to sexual prowess and manhood'.

Dhaliwal, Gauzes, Antonowicz and Ross (1996) also report that boy's experiences of CSA differ according to the nature of the sexual activity and its effects (see also the research of Fromuth and Burkhart later in the next section of the introduction). Jinich, Paul, Stall, Acree, Hoff and Coates (1998) found that 44% of MSM who reported sexual contact between the age of thirteen and fifteen with a person ten or more years older reported that no coercion was involved. Further, research on 192 MSM found that 26% reported sexual contact with somebody five or more years older before age seventeen with only 49% of these men construing such experiences as coercive (either at the time or currently (Stanley, Bartholomew and Oram, 2004)). Importantly, Stanley et al report that those who reported that their sexual experiences in childhood as

coercive had significantly poorer psychological adjustment than those who did not report their childhood sexual experience as coercive.

Overall, then it seems clear that it is possible that it is not only the nature of the sexual act(s) that is important in the likelihood of future revictimisation, but also the perception of the act(s). Bluntly, it may be that a boy who 'consents' to sexual intercourse before age with an older female/male may be less likely to experience NVS in adulthood than a boy (of any sexuality) who is forcibly raped before sixteen by an older man. Definitions of CSA such as that used by Nelson et al (2002) do not allow for the testing of such a hypothesis and would conflate such experiences (and in so doing perhaps decrease the size of the effect of 'intercourse' on revictimisation).

There are reasons to believe that MSM may be more at risk of revictimisation. First, studies of these men indicate high rates of CSA (e.g., Balsam et al, 2005). Second, MSM appear to be more likely to experience NVS (see Table 23 above). A further factor in revictimisation is age as it appears that younger men are more at risk of NVS than are older men (see above).

Methodological issues in research on sexual victimisation

'it is extremely difficult, if not impossible, to determine the absolute validity of self-reported behaviour' (Catania et al, 1996)

The primary aim of this research is to obtain as valid an estimate as possible of the prevalence of NVS. A secondary aim is to test whether CSA (see definition later) is associated with (univariable analysis), and/or an independent predictor of (multivariable analysis) NVS. There are many obstacles to obtaining a valid estimate of the prevalence of a disease/experience. These obstacles include:

Validity issues including

- Psychological sensitivity of the issue
- Reliability of reporting of sexually abusive experiences
- Definition of the experience (construct validity)
- Shame attenuation/normalising techniques
- Mode of inquiry

- Interviewer characteristics

Generalisability issues including:

- Sampling and sample size
- Participation rate

This section of the thesis considers these obstacles in turn.

Validity issues

Psychological sensitivity of the issue

One obvious difficulty with obtaining valid information about a person's history of CSA/NVS is that these are very sensitive issues and there are a number of reasons why participants may not report such experiences. There is, perhaps, a particular difficulty with obtaining valid reports from men about CSA/NVS since it is known that questions about rape elicit moderate to high levels of discomfort among respondents (Catania, Binson, Canchola, Pollack, Hauck and Coates, 1996) and, further, that questions about same-gender sex and anal intercourse elicit extremely high levels of discomfort (Catania, 1997).

Catania, et al (1996) investigated the effects of various aspects of research design on the collection of data about a history of men using telephone interviews. Catania et al investigated the effects of giving/not giving participants a choice of interview gender (half of the participants were given this choice), interview gender and supportive wording (prefacing inquiries re a history of sexually abusive experience with the statement 'The next series of questions is about sexual situations that both women and men have encountered. Sometimes, these are difficult issues to discuss, and we appreciate your willingness to answer these questions'). Catania et al (1996) found that:

- Men were more likely to report a history of sexually abusive experience in the choice (vs. no choice) condition ($p < 0.001$)
- Men were marginally significantly more likely to report a history of sexually abusive experience in the choice-standard compared to the no choice-standard wording condition ($p = 0.07$)
- Men were not significantly more likely to report a history of sexually abusive experience in the choice-enhanced than in the no choice-enhanced wording condition ($p > 0.10$)

- Men were more likely to report a history of sexually abusive experience to a male interviewer (OR 2.4; $p < 0.05$;).

It is important to realise, however, that these data pertain to lifetime history of sexually abusive incidents. Catania et al (1996) argue for using male interviewers in studies inquiring about sexually abusive experiences in men. The correctness of this assertion is considered further in the brief discussion regarding the effects of interviewers on data regarding sexually abusive experiences.

Whatever the survey methodology and supportive wording used, however, it is important to state that research on NVS may cause distress and it is important to ensure that participants have access to means of support should they find participation difficult. It seems likely however, that the most traumatised persons may be least likely to take part in such research, since avoidance of fear provoking stimuli is a diagnostic feature of post-traumatic stress disorder (APA, 1994).

Reliability of reporting

Assessment of the reliability of reporting of sexually abusive experiences is essential as it provides a measure of the consistency of responses to sensitive questions (Dube, Williamson, Thompson, Felitti and Anda (2004). Assessment of reliability is important since it is clear that a measure cannot be valid (measures what it says it measures) if it is not reliable (Bartram, 1990). This is important since it is known that the test re-test reliability of responses to inquiries about men's experience of NVS are imperfect (kappa = 0.64: Krinsley, Gallagher, Weathers, Kutter and Kaloupek, 2003) as are adult's reporting of sexually abusive experiences in childhood (kappa = 0.69: Dube et al, 2004) though considered psychometrically acceptable. None of the studies that used 'bespoke' measures of NVS reported on the reliability of reporting to such inquiries. As such, the validity of much of the research on NVS in men is questionable. Given that some research included very large samples of men (e.g., deVisser et al, 2003) it is disappointing that the researchers did not attempt to conduct a test re-test reliability study. Of course, reliability does not guarantee validity and this is explored later in this section of the thesis.

Definition of CSA and NVS

> *' ... the vocabulary of sex research contains some ill-defined terms' (Wagstaff, Abramson and Pinkerton, 2000).*

Researchers have commented on the difficulties raised by the lack of a single definition of CSA (see for example, Fromuth and Burkhart (1987) and research is underway to develop such a definition (Basile and Saltzman, 2002). Haugaard (2000) has argued that the difficulties in developing a definition for CSA are exemplified by the fact that (with regard to inappropriate sexual behaviour involving children) there seems to be no definitive definition of *child, or sexual, or abuse.* Huagaard's (2000) argument can just as easily be shown to apply to the definition of NVS. Thus, Haugaard's (2000) framework is used here to consider difficulties in the definition of CSA/NVS

Definition of a child/adult

The definition of childhood varies with regard to both legal and research definitions. For example, Graupner (2000) reviewed the age of consent for sexual activity in Europe and the rest of the world. Graupner notes that in half the jurisdictions in Europe the age of consent for sexual activity is fourteen and that this represents an increase from the age of consent of 12-13 years used in many European countries in the 1920s. A dramatic example of this rise in age for legal sexual contact with may be found in a change in South African law. Graupner (2000) reports that it was not until 1988 that the age limit for legal sexual contact between women and boys in South Africa was raised from *seven* to sixteen. Thus, there is variation in the age of consent and this has changed (with ages increasing) over time.

Research definitions also vary according to the age of the victims and the perpetrator. For example, a child has usually been considered to be a person under the age 16 but the age of a child has also been as high as 17 in a study by Finkelhor (1984) and even 18 in a study by Murphy (1987). Authors are not always clear about why they have used given age limits for the definition of a child and it seems clear that comparison between studies is complicated by the fact that where age 18 is used to define adulthood certain experiences (those between 16 and 18) would represent sexual assaults in adulthood in studies that use age sixteen as the cut-off point for adulthood.

A further complication is the fact that in some studies CSA is defined as sexual contact between age discrepant persons. (see Fromuth and Burkhart, 1987) There are some obvious problems with these age discrepancy definitions. These include:

- Age-discrepancy definitions were likely intended to avoid 'consenting' sexual activity between peers being categorised as abusive. Implicit in the age-discrepant definition, however, is the suggestion that capacity for consent is not fixed by chronological age (as is the case with legal definitions) but by the child's degree of psychological sophistication and ability to resist the behaviour of another person(s). Capacity for consent is a complex matter. The five or ten year age-discrepancy is clearly arbitrary and does not really seem to be based on definitive 'milestones' in either psychological or physical development. Further, this type of definition does not account for situations where age discrepancy is not at issue but the capacity for consent is (e.g., a person with a learning disability being exploited by another non-learning disabled person of approximately the same age).
- Age-discrepancy definitions do not take sexual exploitation by persons who are similar in age (younger or older) into account. For example, it seems entirely possible that a thirteen year old could sexually assault a fourteen year old. Further, it seems entirely likely that a fourteen or fifteen year old could sexually assault a fourteen year old.
- Age-discrepancy criteria may have no basis in Law. For example, in England and Wales a 17 year old who had sexual contact with a person under age sixteen would be guilty of a sexual offence against a child. Thus, a single year difference in age may not be considered as relevant in some studies, but would represent a crime.

Age discrepancy criteria may result in underestimates of the prevalence of certain unwanted sexual experiences since they place limits on the reporting of research participants who have experienced sexual abuse by perpetrators who are/were younger than, the same age as or a certain number of years older, than they at the time the participant experienced CSA[46]. Conversely, such definitions will lead to under-

[46] Although they can also lead to people being classified as victims of unwanted sexual experiences when the age-discrepancy would not define a crime or possibly even social sanction.

estimates of illegal behaviours (depending upon the laws of the area in which the study is conducted). For example, in the England and Wales sexual contact between any person over sixteen and any person under sixteen is illegal.

Research has demonstrated that different age-discrepancy greatly criteria impact upon the prevalence of CSA. Fromuth and Burkhart (1987) examined variation in prevalence of CSA in two samples of male college students in the USA using a variety of definitions of CSA (Table 24).

Table 24 *Effect of definition of CSA on CSA prevalence (from Fromuth and Burkhart (1987)*

Definition	**Sample**	**Sample**
	Midwestern (n = 253)	Southeastern (n = 329)
1. Child < 13, perpetrator 5 ≥ years older (or a peer if any force or threat involved)	24%	20%
2. Child < 13, perpetrator 5 years older; child 13-16 perpetrator 10 years older	21%	19%
3. Child < 13, perpetrator 5 years older and at least 16; child 13-16, perpetrator 10 years older	15%	13%
4. Child < 13, perpetrator 5 years older and at least 16; child 13-16, perpetrator 10 years older and force or threat involved	11%	9%
5. Definition 4 but excluding cases not involving physical contact	9%	7%
6. Age requirement (definition 3) and participant viewed the experience negatively	4%	4%

It is clear from these data that the definition of CSA with regard to age discrepancy greatly affects the prevalence obtained. For example, a definition that required that the perpetrator was at least sixteen led to a large drop in prevalence rates. An interesting feature of Fromuth and Burkhart's (1987) data is the finding that only about a quarter of their participants rated sexual experiences where they were aged < 13, but the perpetrators was five years older and at least sixteen, or where the participant was aged

13-16 and the perpetrator was 10 years older perceived the experience as abusive at the time (see the prevalence rates for definitions 3 and six respectively). These data are considered further later.

No study of NVS was found that used age discrepancy criteria to define sexual experiences between adults as abusive Thus, for adults once a person has reached a certain age (the legal age of consent) the age discrepancy criterion no longer applies for research purposes.

Definition of sexual

The Oxford English Dictionary (OED) defines sexual as ' ... Relating to the instincts and activities connected with physical attraction or intimate physical contact between individuals'. As with Wittgenstein's difficulty in defining a 'game', there is also evidence that various behaviours may be classified by some persons as sexual, while others may not consider them such. As with coercion, it seems likely that there is a spectrum of behaviours that may be considered sexual. Indeed the OED definition, is fraught with difficulty. For example, does a given behaviour have to involve physical contact to be considered sexual (what about various remarks?)? Further, what does the word 'intimate' mean in this context? Intimate likely refers to the bodily part(s), but it may also include the 'nature' of the act rather than the bodily part involved. For example, there is likely a palpable difference in the ways in which a person may hold hands with a lover compared with the way in which they would hold the hand of a blind person asking for help crossing a road. Further, it is possible for a person to feel 'psychologically sexually abused' by a person who has never had physical contact with them. For example, a woman may feel 'sexually abused' by an unknown man who broke into her home, found her underwear drawer and ejaculated over its contents. It seems likely that such an act would be considered 'sexual' by many people even though it did not involve any physical contact.

Again, then, researchers face tremendous difficulty in wording (and research participants may experience tremendous difficulty in interpreting) items intended to capture 'sexual' experiences. Thus, much research may not capture a variety of behaviours that either the researcher or the participant did not consider to be 'sexual'. A number of examples of such difficulties follow.

Concerning CSA, Haugaard (2000) argues that while some behaviours ' ... would be considered sexual by almost everyone (e.g., intercourse, genital fondling), there is less agreement about other behaviours, such as bathing children or sleeping with them', and that 'The intent of the adult is an issue in deciding whether a behaviour is sexual, but intent can be difficult to judge in some cases'. Krug (1989) categorised incidents involving mothers and sons as involving inappropriately sexually related contact where contact was prolonged and in which there was unsuitable intimacy. Examples of such abuse were "sleeping together with physical, but not necessarily genital contact; mother masturbating while sharing the bed; actual intercourse between the mother and son; etc." Clearly some of these examples constitute sexual abuse, but there are problems with other examples. First, this definition would imply that only one incident of mother-son intercourse would not constitute abuse (since the definition includes the word 'prolonged'). Second, 'prolonged' is not defined. Third, at what age should a son no longer sleep in his mother's bed (if ever)?

Clearly both behaviour and intent are important in deciding about the sexual nature of behaviour, but it is also clear that certain behaviours that would not be considered sexual (or sexually motivated) at one age may certainly appear so at another. For example, a parent washing the genitals of a healthy one year old is innocuous (provided it is not done for the sexual gratification). Washing the genitals of a healthy fourteen year old would very likely be seen as inappropriate by most care and mental health professionals, as well as the police. Note that this would likely be the case irrespective of the intent of the adult involved.

Regarding adult-adult sex there is disagreement about what adults consider terms such as 'have sex with' mean and, as stated above, it is likely that the wording of inquiries about NVS used in the studies of Schafer et al (2002) and Norris (1992) likely led to under-reporting of forms of NVS. Indeed, Pitts and Rahman (2001) have concluded that their findings regarding the behaviours deemed consistent with having (or not having) 'had sex' with another person:

> *' ... have obvious implications for the wording of questionnaire items that are used in sexual behaviour surveys. Our findings suggest that most people include vaginal and anal intercourse in their definition of sex, but are less likely to count oral intercourse as sex ... A man who engages in oral intercourse, but not anal or vaginal intercourse, may report that he*

is not sexually active if his definition of sex does not include oral intercourse'

Further, Pitts and Rahman (2001) found that students perceptions of whether others would consider a person who had engaged in a given behaviour as having had sex was also partially contingent upon whether (and which) person in a heterosexual dyad experienced orgasm during that sexual act.Given the potential problems outlined above and empirical data on the understanding of colloquial terms for sexual activity it seems clear that (even if provided with a large list of examples) participants may experience difficulty in deciding whether a *given act* was sexual and this may inhibit reporting of experiences intended to be the focus of research.

Definition of abuse

Haugaard (2000) states that some authors object to the ubiquitous use of the word 'abuse' as it implies harm. For example, some authors argue that it is not appropriate to define as abusive sexual incidents between adults and children from which there is no strong evidence of obvious harm (Rind, Tromovitch and Bauserman, 1998). As Haugaard argues, however, this argument appears too restrictive since the dictionary definition of abuse is actually broader than the strict definition suggested by Rind et al (1998). For example, the Oxford English Dictionary defines abuse as:

- Maltreat or assault (especially sexually)
- Use to bad effect or for a bad purpose; misuse
- Unjust or corrupt practice

Thus, it is clear that the term abuse can refer both to the actual harmfulness of behaviour as well as whether the behaviour is considered as unjust or corrupt (the legal definition may perhaps be seen as a combination of both harmfulness and wrongfulness). Accordingly, any legally proscribed behaviour (such as an adult's sexual contact with a child or forced sex between adults) would constitute abuse. A further difficulty with Rind et al's objection is that demonstrable harm is difficult to quantify. For example, what does demonstrable mean? Further, I am aware of only one study that has used formal diagnostic criteria to assess for mental disorders in a community sample of men (Sorenson et al, 1987). Most studies ask only about self-report of a relatively small set of common mental disorders. The validity (actual

positive diagnostic status) of these self-reports is unknown, although subjectively these persons are reporting some form of distress.

Finally, of course, diagnostic manuals (eg. DSM –IV, APA, 1994) do not scope the 'universe of human suffering'. For example, they contain no way to code for the experience of great shame or anger associated with abuse. This is important since it is known, for example, that high levels of trait anger are associated with coronary heart disease (Mendes de Leon, 1992). Further, decisions about harm should not be based solely upon emotional disorder/distress. For example, research demonstrates that sexually abusive experiences are associated with; 1) elevated rates of sickness absence (Golding et al, 1996) and dysfunctional sexual behaviour. For example, research on a large community sample of Swedish men and women (n= 1475 males: Steel and Hurlitz, 2005) found that those who reported sexual abuse before age sixteen were significantly more likely to:

- Have had (consensual) intercourse before age 17
- Have had an STI before age 22
- Have had an unwanted pregnancy
- Have had Chlamydia, Human Papilloma Virus, Gonorrhea or Herpes
- Engaged in anal sex
- Engaged in group sex
- Not interrupted sex despite the risk of pregnancy
- Not interrupted sex despite the risk of STI
- Be a sex worker
- Have a casual sexual partner (in addition to a 'steady' partner)
- Have a partner who also has a casual sexual partner
- Use a non-prescription narcotic
- Have experienced acquaintance rape, physical and sexual assault
- Have had a voluntary HIV test

Studies of sexually abused men have also found evidence for 'hypersexual behaviour', increased number of sexual partners, higher rates of unprotected sex and higher rates of STD, and a greater likelihood of being involved in sex-work than in men who do not report CSA (see Purcell, Malow, Dolezal, and Carballo-Dieguez (2004) for a review).

Thus, any study that finds no evidence for a lack of (say) emotional distress/disorder in those who report sexually abusive experiences should not conclude that these experiences cause no harm. It seems then, that only research that assessed a wide variety of experiences and behaviours and found no different in rates of distress/dysfunctional behaviour in those with/without a history of sexually abusive experiences could make such a claim.

Definition of rape

It is known that the concordance between 'victims'' and researchers definitions of NVS are not perfect (see next section). It is also seems clear, however, that academic and legal definitions of NVS (including rape) may not overlap. For example, Tjaden and Thoennes (2000) report that their definition of rape '... included both attempted and completed rape' with research participants being asked the following (amongst other questions that inquired about actual vaginal /anal penetration by a penis)

- Has anyone, male or female, ever made you have oral sex by using force or threat of force? Just so there is no mistake, by oral sex we mean that a boy or man put his penis in your mouth or someone, male or female penetrated your vagina or anus with their mouth.

Aside from the point that it would likely have been better to have asked about penetration of the vagina or anus 'with their tongue', it is not the case that (in England and Wales at least) penetration of a bodily orifice by a tongue would constitute rape (whereas such penetration by a penis would: Card, 2004). Further, it seems unlikely (though open to empirical test) that a person who had experienced such penetration by a tongue would consider themselves as having been raped.

Tjaden and Thoennes (2000) also asked:

- Has anyone, male or female, ever put fingers or objects in your vagina or anus against your will or by using force or threats?

In England and Wales at least such behaviour would likely represent the criminal act of 'assault by penetration' rather than rape.

Thus, Tjaden and Thoennes' prevalence estimates of rape include behaviours which (depending upon the jurisdiction) are inconsistent with legal and 'social/dictionary' definitions of rape.

As mentioned in the introduction it is also the case that the legal definition of sexual acts can change over time. In England and Wales rape was initially, (behaviourally) defined as penile penetration of the vagina, but after 2003 it included penetration of the vagina and/or anus and/or mouth.

Subjective appraisal of sexual experience as abusive/harmful

It could be argued that the ideal state of affairs for research on sexual violence would be one in which the legal, research and participant's definitions of various forms of NVS completely overlap. Research shows that this is likely infrequently the case, however. Researchers develop items or questionnaires in which they operationalise their construct of NVS/CSA in isolation: the author did not find one study of NVS in men that developed an NVS definition in conjunction with men who had experienced NVS (although it is accepted that the development of such a definition would not be a trivial task). Developing definitions of NVS/CSA with a high degree of overlap between faith and face validity is an important and obvious goal for researchers.

Currently, the possibility exists for discrepancies between researchers definitions of NVS and the definitions of those characterised as 'victims' according to the researchers definition. In fact, research demonstrates that there is a lack of perfect agreement in members of the general population about whether certain sexual behaviours constitute abuse. Bensley, Ruggles, Simmons, Harris, Williams, Putvin, and Allen (2004) found, for example, that their sample rated the following experiences as abusive: making a child touch a parent in the genital area (99.5%); touching a school-age child in the genital area, not for medical reasons (97.6%); a parent or parent figure kissing a child in a sexual way (97.4%); looking at pornographic videos or pictures with a child (96%); and letting a child watch parents have sex (94.4%). Thus, despite high rates of agreement, it is clear that not all participants consider more 'obvious' examples of child sexual abuse as such. Further, academics have not all agreed on whether certain sexual acts between adults and children are harmful (or even likely). For example, Mathis (1972) opined the following re CSA perpetrated by females:

'That she might induce a helpless child into sexplay is unthinkable, and even if she did so, what harm can be done without a penis?'

Empirical investigations of subjective appraisal of CSA/NVS experiences

Few researchers have assessed for research participants' subjective appraisal of sexual experiences in childhood. Fromuth and Burkhart (1987) obtained retrospective data on male college student's reactions at the time they experienced various forms of CSA before sixteen. Reactions varied according to CSA definition (Table 25).

Table 25 *Reaction (recalled) at time of experience according to CSA definition (adapted from Fromuth and Burkhart, 1987)*

Recalled reaction	Definition	Definition
	3. Child < 13, perpetrator ≥ 5 years older; child 13-16, perpetrator 10 years older (%, n)	As with definition 3, but participant also viewed experience negatively (%, n)
Fear	6 (5)	21 (4)
Shock	6 (5)	11 (2)
Surprise	28 (25)	47 (9)
Interest	29 (26)	16 (3)
Pleasure	31 (28)	5 (1)

Fromuth and Burkhart also asked participants to rate the degree to which they believed that their experiences had affected them (positively, negatively, or not at all). Fromuth and Burkhart found that older boys were significantly more likely to retrospectively rate the experience on their life as positive, than were younger boys ($p < 0.01$: Table 26).

Table 26 *Retrospective rating of abuse effect as a function of age (adapted from Fromuth and Burkhart, 1987)*

Age at time of abuse	Positive affect % (n)	Neutral affect % (n)	Negative affect % (n)
13-16 years	60 (18)	37 (11)	3 (1)
< 13	26 (13)	52 (26)	22 (11)

These differences in perceptions are not likely to be solely due to age. Fromuth and Burkhart found that the majority of perpetrators (78% in the Midwestern sample; 72% in the Southeastern sample) were female and known by the participant (83% in the Midwestern sample and 96% in the Southeastern sample) and involved low levels of force or threat (10% in the Midwestern sample and 17% in the Southeastern sample). It is likely, then, that many of these experiences involved sexual contact between younger boys and older women. It has been argued that such experiences may not be viewed negatively (Bolton et al, 1989).

Note, however, that Fromuth and Burkhart (1987) seem to argue that this societal view is argued to hold only for heterosexual experience 'male sexual socialisation encourages men to define sexual experience as desirable as long as there is no homosexual involvement'. Unfortunately, Fromuth and Burkhart were not able to test this directly since they had no information on the sexuality of their participants or of the gender of the persons with whom their participants reported having sexual experiences up to and including age 16. It is known, however, that homosexual men also differ in their perception of their experience of sexual contact below the age of consent with older persons. For example, Dolezal and Carballo-Dieguez (2002) found that only 41 of 100 Puerto Rican men who reported having male sexual partners perceived their sexual experiences before age 13 with a person at least four years older as sexual abuse.

Perhaps the most important aspect of Fromuth and Burkhart's data is that it is likely helpful to distinguish between different sexual experiences men may have in childhood. Recall that Fromuth and Burkhart's (1987) first definition contained either age discrepancy criteria only (for older perpetrators) or a perception of force or threat where peer abuse was involved. Differences in perceptions of the events may not be surprising therefore if a (heterosexual) 16 year old boy experienced unforced sexual intercourse with a 26 year-old woman[47] is grouped together (due to the definition) with a (heterosexual) boy aged 12 who was anally penetrated by a 16 year old boy. It seems reasonable to conclude that persons experiencing these disparate events would construe them differently, and that they may have very different effects on mental health and social functioning.

[47] A situation which would not be an offence in England and Wales

There is also evidence that men who experience unwanted/non-consensual sexual experiences in adulthood do not always rate these experiences as distressing. For example, Struckman-Johnson (1988) found that 27% of men who reported NVS in a dating situation rated the experience as 'Felt good-very good', with 46% endorsing the item 'felt neutral'. Further, Krahe et al (2003) obtained data from two samples of men who reported experiencing non-consensual sex with women ('sexual contact ... against your will') as a result of the women using physical force (i.e., ' .... By threatening to use force or by harming you'), exploiting the man's incapacitated state (i.e., after his use of ' ... too much alcohol or drugs'), or verbal pressure (i.e., ' .... by threatening to end the relationship or calling you a failure'. Men were asked about a variety of sexual acts that took place under these circumstances and were asked to provide ratings of the degree to which they rated these experiences as upsetting on a five-point scale (1 = not at all upsetting; 5 = very upsetting). Overall, the majority of men did not find their experiences of non-consensual sexual contact with women upsetting (Table 27).

Table 27 *Per cent of men rating [48] non-consensual sexual activity as distressing according to different types of coercion in two samples of German men (Data adapted from Krahe et al, 2003).*

	Force	**Exploitation of incapacitated state**	**Verbal pressure**
Sample 1	32%	26%	40%
Sample 2	39%	17%	40%

Thus the data of Struckman-Johnson (1998) and Krahe et al (2003) demonstrate that when men report unwanted/non-consensual sex with a female they may not experience distress.

Concordance between research and participants' definition of NVS

There is much research (on females) to demonstrate a lack of overlap between faith and face validity of definitions of NVS. For example, participants who responded in the affirmative to a self-completion cue questions regarding sexual assault n a large survey of crime victims (British Crime Survey: BCS) were asked to categorise their (most serious) experience since the age of sixteen. Percy and Mayhew (1997) found that only

[48] Ratings of 4 or 5 on the distress scale

just over a third of *women* who responded affirmatively to the item about coerced sex (intended to be the legal definition of rape) subsequently rated their most serious experience of this type as rape (Table 28).

Table 28 *Concordance between participants' and researchers' definitions of sexual experiences reported by women in the British Crime Survey.*

Only reported	Described as rape (%)	Described as attempted rape (%)	Described as indecent assault (%)	Described as offensive behaviour (%)	Described as other behaviour (%)
Coerced sex	34	19	19	21	17
Attempted coerced sex	6	25	16	41	11
Unwanted sexual contact	2	3	17	62	17

Research using a list of behaviourally specific questions has also been found to be subject to the problem of non-concordance between the meaning of the items to the researcher and the participant[49]. For example, Koss (1985) surveyed 2016 students using the SES together with the appended question 'Have you ever been raped?' Participants were divided into groups:

1. Highly sexually victimised: Acknowledged victims[50] – those who reported to having submitted to oral, anal, or vaginal intercourse against their will in the past and who responded in the affirmative to the question about having been raped
2. Highly sexually victimised: Unacknowledged victims - those who reported to having submitted to oral, anal, or vaginal intercourse against their will in the past and who responded in the negative to the question about having been raped

[49] In fact it is possible that this problem could be magnified

[50] This research is a paradigmatic example of lack of concordance between faith and face validity. Note that Koss describes those who responded in the affirmative to her questionnaire about sexual experience that Koss defines as rape, but who respond in the negative to direct inquiry about being raped as 'unacknowledged' rape victims. As Kahn, Jackson, Kully, Badger and Halvorsen (2003) argue this implies that a rape took place (suggesting that the researcher 'knows better'). In their study of females who did/did not regard their experience as rape, Kahn et al use the term 'labelled her experience as ...' to avoid the assertion of faith over face validity.

3. Moderately sexually victimised - those who reported sexual contact (fondling, kissing) or attempted sexual intercourse against their consent through force, or threat of force

4. Low sexually victimised – those who reported intercourse when they did not desire it subsequent to the use of extreme verbal coercion, insistent arguments, false-promises, or threats to end the relationship by the man (none of these women viewed indicated that they had been victims of rape)

5. Not sexually victimised – those who reported no non-consensual sexual experiences

In total, 13% of the participants in the sample were in one of these groups. Forty-three per cent of women in these groups were considered unacknowledged victims. Two hundred and thirty one women (from the 12.7%) were interviewed after indicating that they would be prepared to take part in further research. The SES was re-administered and the test re-test reliability correlation coefficient of $r = 0.71$ was obtained ($p < 0.001$). Using the classification procedure outlined above 23.5% changed category, however (with approximately two thirds of these going ***'down'*** a category and one third going up a category). This raises an interesting situation since it may have been more appropriate to assess the reliability of the categorical classification than the continuous data obtained from SES\scores and time 1 and time 2. Statistical tests on a number of variables comparing the victimised groups (1 to 4 above) found that:

- High unacknowledged rape victims were most highly acquainted with the perpetrator, while acknowledged victims were least likely acquainted with the perpetrator
- High unacknowledged rape victims reported greater prior intimacy with the perpetrator than moderately or highly victimised (acknowledged) rape victims.

Thus, Koss concluded that unacknowledged rapes were ' ... *much more likely to take place in the context of a relationship that was appropriate to sexual intimacy whereas acknowledged rapes more typically occurred in inappropriate relationships'*.

Layman, Gidycz and Lynn (1996) also found discrepancies between responses on the SES and research participants' construal of their experience as rape. As with Koss'

study reported above, a survey of a student sample (n= 591) used the SES and identified acknowledged vs. unacknowledged victims by asking the following question: *'Looking back on the experience, how you would describe the situation?'* Responses were as follows;

1. I don't feel I was victimised
2. I believe I was a victim of serious miscommunication
3. I believe I was a victim of crime other than rape
4. I believe I was a victim of rape

Those participants whose SES responses were consistent with rape and who endorsed option 4 were labelled as acknowledged rape victims, while whose SES responses were consistent with rape and who endorsed items 1-3 were labelled as unacknowledged rape victims. Responses on the SES found that 14% (n=85) of the student sample met the SES criteria for rape. Twenty-three (27%) of these women stated that they had been raped. Those participants labelled as unacknowledged described their experiences as follows:

- Not victimised - 22.5%
- Serious miscommunication – 62.5%
- Victim of crime other than rape – 15%

Twenty of the acknowledged victims and twenty-three of the unacknowledged victims returned to be interviewed. The SES was again administered at this stage and Layman et al report that:

> *'Nonvictims' responses were consistent (99% test-retest) across testings. For both victim groups, 84% of responses stayed the same, resulting in an overall percentage of 88% for the entire sample. In most cases the, the participants moved down a level of victimisation during the second administration of the survey'*

It is clear, then, that test-retest reliability was imperfect and that at retest 'most' participants *'moved down a level of victimisation'*. The exact number is not specified, but these results seem similar in principle to those obtained by Koss (1985).

Finally, another large study (n = 1395) of female students recently found large discrepancies between type of sexual victimisation as construed by the SES and as construed by participants (i.e., participants were asked 'have you ever experienced sexual abuse or assault from a dating partner?': Harned; 2004: Table 29)

Table 29 *Difference between SES and participant classification of NVS experiences (adapted from Harned (2004)).*

Sexual victimisation type	**Behavioural approach to classification (SES responses: %; n)**	**Affirmative response to inquiry about a history of sexual abuse or assault in a dating relationship (%; n)**
Unwanted sexual contact	9 (122)	< 1 (6)
Sexual coercion	5 (70)	< 1 (3)
Attempted rape	8 (101)	1 (14)
Rape	13 (171)	4 (47)
Sexual victimisation total	34 (464)	5 (70)

The data in table 29 clearly demonstrate a large discrepancy between classification as a victim of NVS using either the behavioural approach or the labelling approach. The situation is complicated, however, by the labelling definition. It is possible that participants may not have reported sexual assault by a dating partner as they may have assumed that the lack of the qualifier sexual before the word assault may have led them to confusion about whether they should include sexual assault and/or 'physical' assault when responding to the labelling question[51]. As such, the data in table 29 above could underestimate the rate of self-labelled sexual victimisation, or it could overestimate the rate of sexual victimisation if participants included (physical) assaults when responding.

Thus, while many authors advocate providing a list of behaviours (rather than a screening question) to survey participants it is clear that this method is not without difficulty since only a minority of persons who would be considered to be rape victims as defined by the SES actually use this label when asked directly about the experience. This may be because survey participants are more likely to agree with legal definitions

[51] It is accepted, of course, that the overwhelming context of the labelling question was about *sexual* assault, but it is possible that some participants considered the question ambiguous.

of rape (see Glylys and McNanamara, 1996), than with the researchers definition of items that constitute rape.

Meaning of the terms forced, non-consensual and unwanted in definitions of NVS

Research participants must decide if their experience(s) is relevant to the question(s) posed about the experience of NVS. Clearly, this involves deciding on the meaning of terms used in the definition of NVS. Deciding on whether to respond in the affirmative to an inquiry about NVS will likely depend upon the individuals' understanding of the term(s) and the circumstances that justify a positive response. The research of Hamby and Koss (2003) is of direct relevance to the findings about non-concordance discussed immediately above. Hamby and Koss (2003) report on data from focus groups discussing questions about NVS used in a large survey which inquired about NVS experiences that participants felt the terms unwanted, non-voluntary and forced were distinct terms (although they are often used synonymously in research). This was despite the fact that participants were not sure what terms like force actually meant. Hamby and Koss (2003) report that: 'There was general consensus that the word forced is vague. The group participants felt it was not clear if forced meant physical force, fear of physical force, or something else'. Indeed, one participant opined:

> *'What's the difference between forced and involuntary, kind of, you know what I mean? If nobody's holding you down, is it still forced, is it still not really want to do this'.*

Based on their findings, Hamby and Koss (2003) argue that coercion is a 'complicated construct' that is not captured either by dichotomous categorisations such as forced or not. Further, Koss and Hamby (2003) argue that coercion is even less well represented when terms such as unwanted, nonvoluntary and forced are used synonymously. Finally, Koss and Hamby argue that:

> *'The differences in meaning among these words have major implications for evaluating the adequacy of rates obtained in epidemiological studies and comparing rates across studies that use different questions to assess sexual assault'*

Similar to Hamby and Koss,, Marston's (2005) qualitative work on the meaning of 'heterosexual coercion' (including female 'coercion' of males) led her to conclude that '... coercion is a highly subjective and fluid concept'.

Thus, it is clear that the meaning of various terms used in research on NVS is not clear. It seems reasonable, to conclude, however, that a 'spectrum' of coercion exists (as described above by Kalmuss) and it remains a research goal to create 'labels' that capture different 'points' along this spectrum. Valid terms to define the severity of NVS experiences would be of great use since they could be used to test for different behavioural and psychological effects of these experiences. Certainly, research into the definitions of NVS is now becoming more sophisticated and Krahe, Schleinberger-Olwig and Bieneck (2003, see later in the discussion) for example has described different forms of communication ('token resistance' and 'token compliance') about sexual intent (on behalf of 'victims') which have implications for developing an understanding of the difficulty victims may have in locating an experience on the 'spectrum' of NVS.

Differences in victim/perpetrator perspective

Schafer et al (2002) asked members of US couples if they had forced their partner into sex in the last twelve months. Concordance between judgements of whether both partners agreed that the female had forced sex on the male was low (kappa = 0.16). Importantly, the female partners were more likely to report forcing their male partners than these male partners reported being forced (Table 30).

Table 30 *Rates of agreement about forced sex in heterosexual couples (from Schafer et al, 2002)*

Forced sex	WYMY[52] (%)	WYMN (%)	WNMY (%)	WNMN (%)
	0.05	0.42	0.16	99.38

Obviously only a very small number of cases of NVS occurred (incidents where at least one partner believed NVS had taken place), but the data do suggest that men whose partners report forcing them to have sex do not always considered themselves to have been forced. This suggests that men and women in Schafer et al's study may have

[52] WYMY = Woman says she perpetrated, man says she perpetrated and so on

different conceptions of forced/non-consensual. Consistent with this possibility, evidence from vignette studies shows that men and women differ in their ratings of the degree to which they believe certain sexual encounters could be described as non-consensual (with males ratings frequently being significantly lower – and never higher – than those of females: e.g., Haworth-Hoeppner, 1998)

Inclusion of circumstances that may not involve 'coercion'

Note also, that the definition of NVS may preclude experiences as a result of tactics other than coercion/force. For example, Elliott et al (2004) accept that their definition of NVS excludes '... sexual acts committed when the victim is intoxicated, unconscious, or otherwise unable to consent to sex'. Thus, definitions of NVS that explicitly state or imply the use of force may preclude experiences such as, for example, waking to find a person performing a sexual act (an act that would not (necessarily) require/include force on behalf of the perpetrator). Essentially, would a person who was too drunk to 'say no' to a person who engaged in sexual activity with them consider that they had been forced into sexual activity due to heavy intoxication? It is clearly plausible that a person who (for example) woke after heavy drinking to find a person performing a sexual activity on them may acknowledge that the sexual act was non-consensual, but not respond in the affirmative to being forced to have sex (as they may construe force to mean physical restraint/hitting etc.).

Inclusion of attempted sexual assault

The definition of NVS also affects the reported prevalence rate of this experience in adulthood. For example, some research includes both actual and *attempted* NVS in their definition (e.g., Sorenson et al, 1987). It is difficult to be too critical of this use of classification in the absence of a formal research definition of NVS, but there is evidence that including attempted NVS can raises the prevalence rates of various forms of NVS (see Walby and Allen, 2004, but also see the BCS data presented earlier which found no difference between attempted and actual prevalence rates of NVS reported by men). Further, one might speculate on the variety of experiences that research participants may have regarding the meaning of *attempted* NVS.

Definitional issues: 'Gate' questions vs. lists of sexual behaviours

Research has demonstrated that, as with CSA, the definition of NVS affects the prevalence rates obtained. There is debate about the merits of so-called 'Gate'

questions that ask if a person has experienced a form of NVS versus the provision of a list of behaviourally specific questions that - if endorsed - lead to the researcher labelling that person as being 'positive' for the event(s) that is the focus of the research.

Gate questions

The gate queston is most typically a single question inquiring about a history of NVS. Such questions have been used in large-scale epidemiological studies inquiring about NVS conducted on men and women (e.g., Sorenson et al, 1987; Elliot et al, 2004; Pimlott-Kubiak et al, 2003). While gate questions are efficient with regard to time (Sorenson et al, 1987) it is argued that such questions may lead to validity problems since:

> ' ... *valid answers to such topics [taboo items] require careful introduction, proper survey auspices and a well-planned line of questioning that does not depend on one or two blunt items*' (Sheastley, 1983, in Koss 1993).

This is a good quote, but it is not clear what careful introduction might involve, what proper survey auspices mean or what makes an item(s) blunt. Koss (1993) argues, however, that gate questions are not appropriate as they result in lower prevalence estimates of SA than does research using behaviourally specific questions. There is empirical support for Koss' assertion. For example, Gorey and Leslie (1997) performed a regression analysis on data from papers reporting CSA prevalence and found that variability of abuse was a significant predictor of increased prevalence of CSA, with 'wider' definitions leading to greater prevalence rates. Thus, there seems good evidence that the wider the definition of CSA used in a study the greater the prevalence rate obtained.

Regarding adults, it is also clear that the question posed will affect the prevalence rate. For example, a change in the screening question regarding sexual assault in the British Crime Survey lead to a doubling of affirmative responses between 1982 and 1984 (Percy and Mayhew, 1997). It seems unlikely that the (12-month) incidence of sexual crime against women doubled in that time and it may be assumed that the change in definition led to the increased rate of reporting (Percy and Mayhew, 1997).

Thus, it has been argued that it is important to provide a number of questions to capture the 'true' prevalence of CSA / NVS. An approach that could be considered intermediate between a single gate question and a list of specific sexual behaviours is the use of a number of gate questions. These questions do not specify specific sexual behaviours, nor are the precise about given situations. Rather, the approach is to ensure that a variety of 'classes' of behaviour (actual or attempted sexual contact) by different persons (i.e., known/unknown) are included in reports by survey participants. This tactic was employed in a revision to the British Crime Survey conducted in 1994 (Percy and Mayhew, 1997). The BCS is a face-to-face interview conducted on a representative sample of households in England and Wales. This implementation of the BCS posed a 'screener' question about sexual assault (to women only), which if responded to in the affirmative resulted in the administration of a 'victim form'. Reported events are classified as sexual crimes (or not) based on the answers provided to victim form questions (Percy and Mayhew, 1997). In addition to this procedure a large sample (n = 5332) of women in the sample aged between 16 and 59 also completed a computer-based interview that posed three questions:

- Since you were 16 has anyone, either a stranger or someone you know, ever forced you to have sex[53] against your will? (Referred to as coerced sex in the paper)
- (Apart from this/these incidents) Since you were 16 has anyone, either a stranger or someone you know, ever ATTEMPTED to force you to have sex against your will? (Referred to as attempted coerced sex in the paper)
- (Apart from this/these incidents) Since you were 16 has anyone, either a stranger or someone you know, ever touched you or grabbed you in a sexual way against your will? (Referred to as unwanted sexual contact in the paper)

These behavioural descriptions were intended to map onto the legal definitions of rape, attempted rape and indecent assault respectively. Table 31 below compares the

[53] It is important to note that the term 'have sex' was used in the definition, and according to the research of Pitts and Rahman considered previously this may have led to decreased reporting of certain sexual behaviours that the participant was made to perform and /or engage in.

prevalence of various forms of sexual assault elicited either from the victim form[54] or from the computer interview.

Table 31 *Prevalence of NVS according to victim form and computer interview data*

Questions in computer interview	**Rate (%)**	**Victim form estimates***	**Rate (%)**
Coerced sex	1.9	Rape	0.1
Attempted coerced	1.8	Attempted rape	0.1
Unwanted sexual contact	5.7	Indecent assault	0.5
Any of these	7.5	Any of these	0.7

* Victim forms are completed after a participant reports having had an experience in response to a screener question administered by the interviewer. Data refer to incidents that occurred within the last fourteen months

These data clearly show large discrepancies between the data collected from the two modes of questioning. There are a number of reasons why the increased prevalence rates may not be due to an increased number of questions, however. First, the victim form data may likely result in lower prevalence estimates than the screening questions since not all positive responses to the screening questions were classified as a crime on the victim forms. Second, not only is there a difference between the number of questions posed (one about sexual violence prompting the completion of a victim form, but three posed by the computer), there is also a difference in data collection mode. It seems likely that face-to-face interviews may result in less veridical responding[55] due to factors such as embarrassment and whether or not the participant and the researcher were the only people in the room when the interview took place.

Whatever, the explanation, however, Percy and Mayhew (1997) found that only 5% of those who reported coerced sex, 5% who reported attempted coerced sex and 3% who reported unwanted sexual contact at the self-completion cue had victim forms related to sexual offences.

[54] Coding of an incident as a sexual offence is achieved via guidelines provided by the police and an incident could be coded as a sexual offence irrespective of the content of the original screener question (Percy and Mayhew, 1997).

[55] Mode effects are considered in more detail later in a later section of the introduction

Percy and Mayhew (1997) conclude that it is necessary to ask a number of questions about NVS, as a single question does not facilitate recall. This may be partially true, but their assumption is confounded by the use of different modes to collect their data. It is not clear, however, that an increased rate of reporting due to a change in the number of questions necessarily means that the researcher has got closer to the 'true' prevalence of an event (see the section on construct validity in the discussion).

Behaviourally specific questions

The alternative to the 'gate' or screening question (or questions) is to provide a list of experiences that survey participants may have had and to classify persons as being a victim of NVS depending upon affirmative responses to a single (or multiple) list item(s). This approach is currently being advocated for investigations into both CSA (Hamby and Finkelhor, 2000) and NVS (Hamby and Koss, 2003). The Sexual Experiences Survey (SES: Koss and Gidycz, 1985)) is an example of such a list of questions. The original version of the SES contains ten items regarding a number of types of experiences. There are a number of difficulties with the SES (and potentially) any other list of sexual behaviours. First, as it is only concerned with rape it does not contain items which would represent other sexual behaviours, which, depending on the context, may form part of NVS. Note also, that, depending upon the population being researched, it may be necessary to change the list of behaviours (e.g., when investigating within relationship sexual coercion in homosexual relationships) or have a very long list of behaviours. Perhaps most crucially for an instrument designed to detect the prevalence of rape scrutiny of two SES items by lawyers found that they were not consistent with the legal definition of a sexual offence (Gylys and McNamara, 1996). Thus, it appears that in the case of the SES, certain items indicate disagreement (or lack of overlap) between research and legal definitions of sexual offences. This situation has been summarised by Spitzberg (1999) as being a problem that ' ... may indicate either that laws are too restrictive, or that the [SES] items are too inclusive'.

Gate vs. behavioural questions

In summary, it is clear that there is imperfect overlap between legal, research and participant definitions of CSA/NVS. It is clear that researcher and participant definitions do not overlap perfectly when assessed either by a list of gate questions or by a behavioural list (as with the SES). It is not unequivocally known if this lack of overlap is greater when gate questions or a list of behaviours is used to define NVS.

Research also demonstrates that the test-retest reliability of the definition (or list of behaviours comprising the definition) is imperfect, and this can be a source of error in the measurement of the prevalence rate of NVS in adulthood. The problem is also compounded by the multiplicity of definitions of non-consensual sexual activity (either in gate, or in a list of behaviours form). Finally, although it seems clear that a list of behavioural questions leads to a higher prevalence rate than does a single or list of gate questions, it is not at all clear that such higher rates represent more valid estimates of the 'true' rate of the sexual event under scrutiny (Percy and Mayhew, 1997).

Mode of data collection

This section of the thesis considers the impact of different types of survey mode on the data collected. The primary goal of surveys is, of course, to obtain information that is as valid as is possible. Clearly a number of factors will affect willingness to disclose these experiences (see next section), but it seems likely that the perceived (and actual) level of anonymity, privacy and confidentiality will likely affect reporting. Indeed, it has been argued that survey modes that increase privacy increase honest self-disclosures (Catania, 1999). This section reviews literature pertaining to different survey modes, their merits and de-merits and their effect on rates of reporting of sensitive behaviours.

Self-report questionnaires (SRQs)

SRQs are the most common mode of inquiry into NVS in men. The SRQ has a number of advantages in that it is often economical to produce and distribute and this enables potentially large numbers of persons to be surveyed. SRQs can be provided during visits to clinics where they may be taken away for completion and subsequent postal submission, completed at the place of distribution, or posted to participants. A problem with postal SRQs, however, is that they often achieve low response rates and this will obviously affect the validity of the data obtained. SRQs also face other technical difficulties in that they require the participant to be literate. Indeed, it has been argued that:

> *' ... being a survey respondent is, in many ways, a middle class game; it requires a certain amount of verbal fluency and a capacity for abstract conceptualisation, both of which are to some extent concomitants (if not consequences) of formal education. It would not be surprising to find*

that these classroom-like tasks would be better performed by those with more practice (in the classroom) at them' (Sparks, 1981)

Furthermore, it is argued that questionnaires about topics such as sexual experiences often require complex 'branching' and this may result in survey errors (Gribble, Miller, Rogers and Turner, 1999). While it may be assumed that SRQs would represent a private mode of survey inquiry the data suggest that other methods lead to higher rates of reporting of sensitive behaviours (see later in this section).

Face to face interviews

The obvious difficulty with interviews about sensitive topics is likely reluctance to disclose information to another person and this can result in reduced prevalence of the sensitive behaviour. Interviewer characteristics are also important. For example, when given a choice, women overwhelmingly choose to be interviewed (about sexual experiences) by females, but only 50% of men choose to be interviewed by males (Catania, et al 1996). The attractiveness of the interviewer may also be important. One study found that participants were significantly more likely to disclose a sexual problem to therapists rated as attractive, than to therapists rated as unattractive (Harris and Busby, 1998).

Further difficulties with face to face interviews include the degree to which interviewers adhere to the interview 'script'. Research has found, however, that a conversational style interview led to a decrease in error when compared with a standardised interview (Schober and Conrad, 1997). While it is argued that the conversational style interview may help to put the respondent more at ease, there is no strong evidence that this is the case (Catania, 1999). The difficulty with non-standard administration is, of course, that there is no metric of non-standard and it is possible that interviewer behaviour could fluctuate widely within and between interviews. Further, it is known that certain personality types ('openers') are better at eliciting sensitive information than others (Miller, Berg and Archer, 1983). Although this may be seen as positive it is unlikely that people are selected for this trait (I have never seen this reported) and if such an opener, in a conversational style interview, were to interview, say, more white than non-white participants then this could lead to problems at the data analysis stage. Finally, strict adherence to interview protocol should, in

theory, increase the reliability of reporting since the questions posed at T1 and T2 are identical.

Telephone interviews (TI)

Telephone interviews (TIs) have the obvious methodological limitation that they require that the participant have a telephone. Further, a problem with any type of telephone interview is that researchers cannot be sure of the identity of the person providing the data. When compared with face to face interviews, non-computerised TIs have lead to a higher rate of completion of interviews on criminal behaviours such as drunken driving (Bradburn and Sudman, 1979). Conversely higher rates of reporting of drug use have been found using an SRQ compared with a TI (Gfroer and Hughes, 1992).

Research comparing responses to questions posed by Telephone-Audio Computer Aided Survey Interview (T-ACASI) and standard TI (administered by researcher) has found that T-ACASI lead to higher reported rates of anal intercourse (Turner, Miller, Smith, Cooley and Rogers, 1996). T-ACASI was also associated with higher rates of reporting of other sensitive behaviours and lower rates of behaviours that could be considered socially undesirable (see Turner et al, 1996). Further, among those believing that one mode was superior to another[56] T-ACASI was considered a better protector of privacy (9:2 ratio), a better mode for collecting sensitive information (3:1 ratio), more likely to lead to honest responding (4:1 ratio) and to provide a more comfortable environment for responding to sensitive questions (2:1 ratio). The increased rate of reporting and these preference data suggest that the privacy accorded by T-ACASI is associated with an increase in veridical responding (and validity of the research).

Computer-assisted personal interview (CAPI)

In this mode researchers ask questions posed by the computer and enter participant's responses. The participant receives standard questions (provided the interviewer does not deviate from the script). A further advantage is that the computer can automatically locate the correct question 'node' in the algorithm 'tree' of the interview contingent upon the participant's responses. Further, the computer can automatically check for incorrect data entry (e.g., inconsistencies in answers, checking for 'out of bound' and

[56] This was a crossover design in which participants answered one section of the interview by T-ACASI and another to a human interviewer and vice versa.

'illegal' responses). Other than these advantages, this mode faces the difficulties reported for face to face interviews.

Computer assisted survey interview (CASI)
In this mode the computer presents questions and participants enter their responses using the keyboard (or touch-pad/touch-screen). As with CAPI, CASI can ensure standard administration, automatically locate the correct question node in the interview and check responses for their 'legality'.

Audio-Computer-Assisted Survey Interviewing (A-CASI)[57]
In this mode the computer presents questions and response choices aurally (and in some cases on the computer screen also). The obvious advantage of A-CASI is that it does not require that the respondent be literate.

A-CASI has been used in a variety of large surveys on sexual behaviour (see Gribble et al, 1999) and is associated with increased rates of reporting of sensitive behaviours compared to other modes. For example, when compared with SRQs, A-CASI has increased reporting of receptive anal sex in adolescent males (Turner et al, 1998). A comparison of A-CASI and A-CASI together with questions presented on screen found that A-CASI together with screen presentation was completed more quickly, resulted in fewer repeated questions, and fewer incidents of returning to a previous question (Rogers, Miller, Forsyth, Smith and Turner, 1996). Participants who expressed a preference chose the A-CASI with screen presentation (9:1 ratio), but considered that it offered a little less privacy (likely because participants were concerned that it may be possible for others to see questions presented on the screen, Gribble et al, 1999).

A comparison of CAPI, CASI, and A-CASI found that A-CASI was associated with a larger number of reported sexual partners (Tourangeau and Smith, 1996). Both CASI methods resulted in a smaller disparity between number of reported sexual partners in men and women and A-CASI resulted in higher reported rates of oral and anal sex compared with the other modes (Tourangeau and Smith, 1996). Likely because of the research presented above, A-CASI is now the recommended mode of survey administration in surveys on child sexual abuse (Hamby and Finkelhor, 2000). A-CASI

[57] At the time the research was conducted there were no publications on surveys using either A-CASI or T-ACASI

has also been used in a number of national surveys of sexual behaviour in the USA (see Gribble et al, 1999).

In summary, there is good evidence that different survey modes lead to different prevalence rates for sensitive topic areas such as various sexual and illegal behaviours, with more 'private' modes associated with increased reporting.

Interviewer effects

Catania et al (1996) found higher rates of reporting of NVS to male (telephone) interviewers who used a 'scripted' interview. This is important since much previous research has used interviewers either face to face (e.g., Sorenson et al, 1987 Plant et al, 2005) or via telephone (deVisser et al, 2003). Sorenson et al (1987) found a small effect of interviewer gender (increased reporting to female interviewers), but found that this then disappeared after controlling for gender of the interviewee also. Tjaden and Thoennes (2001) also found a small effect of interviewer gender (for reporting of NVS experienced in the last twelve months only) with men being more likely to report NVS to male interviewer as Catania et al (1996) found.

Analyses of interviewer effects need to be interpreted with caution, however. For example, Daily and Claus (2001) report on data regarding a history of physical or sexual abuse in 8276 patients assessed by twenty-two interviewers at a drug treatment centre. Crude odds ratios indicated that male clients were more likely to disclose sexually abusive experiences to female interviewers. However, this difference disappeared after controlling for age, ethnicity (white vs. non-white), and gender differences (including client gender * interviewer gender and client race * interviewer race interactions) between patient and interviewer. In fact, it was only after finally controlling for age differences between client and interviewer that the increased odds for reporting of sexually abusive experiences to female interviewers ceased to be significant.

No meta-analytic study of interviewer gender effects regarding CSA/NVS history was identified that could provide less ambivalent evidence for interviewer effects in research on reporting of these experiences. It seems, clear, however, that there is some evidence for interviewer effects, but that these effects may disappear after controlling for 'confounders' (the difficulty being, of course, identifying the relevant confounders).

Generalisability

Sampling and sample size

It is clear from the discussion of the prevalence studies above that a variety of samples and sampling methods have been used to obtain a prevalence of men's reported experience of NVS in adulthood. The sample used will obviously affect the external validity (i.e., the degree to which it is correct to generalise the findings from the research to). Some studies of NVS cannot possibly provide a valid estimate of these experiences (e.g., studies on students from only one university, studies on MSM from one 'site' only and studies of incarcerated men from one institution). It is also clear that various community studies are unlikely to provide truly valid estimates of men's reported experience of NVS in adulthood since they have used telephone 'directories' to identify persons in their sample and this can result in under-representation of a sizeable proportion of the population.

A further issue with regard to sampling is sample size. Sample size is perhaps particularly important in the investigation of the causes and correlates of disease/experiences with potentially low base rates since, all other things being equal, larger studies should have more statistical power to test for associations between variables of interest (and the confidence intervals of these associations should be narrower).

Participation rate

The participation rate of a study also affects the degree to which it is safe to generalise the findings of the study (i.e., it affects the external validity of the study).

Note, however, that the participation rate is a crude metric of the generalisability of the study. This is because the rate itself states nothing about any differential participation in the study. For example, if older people or people from a particular ethnic group, or social class are less/more likely to participate then this can affect the prevalence rate obtained.

Non-demographic factors can also affect participation in a study. One of these factors includes the variable of interest. A reasonable 'common sense' assumption is that people who have experienced NVS will be less likely to take part in research due to

embarrassment/shame and/or ongoing emotional difficulties associated with the experience. Research seems to demonstrate, however, that the opposite may be the case. An analysis of 16 studies of child sexual abuse in females found that the prevalence of CSA was two-thirds greater in studies with a participation rate of less than sixty per cent than in studies with participation rates of 60% or greater (27.8% and 16.8% respectively: Gorey and Leslie, 1997). Further, a regression analysis predicting the prevalence of CSA using seven variables (response rate, breadth of definition of CSA, sample size, sampling method (random/convenience), sample type (general or college) and location (USA or Canada)) explained approximately 50% of the variance in prevalence with only two variables (participation rate and breadth of definition being significant predictors (Gorey and Leslie, 1997).

Sorenson et al (1987) also stated that 'A review of previously published research indicates that the higher the completion [participation] rate, the lower the rate of sexual assault. Thus, it has been argued that persons who have experienced CSA or NVS may be more likely to take part in research about these experiences (Gorey and Leslie, 1997). This may be the case because those who have had these experiences are more likely to see the research as relevant and/or to believe that taking part will be helpful to others. The implication of the possibility of differential participation (in this case increased participation by persons who have experienced NVS in adulthood) is that this would lead to a higher prevalence rate obtained by the study. Thus, it seems fair to conclude that, all other things being equal, the greater the participation rate, the more accurate the prevalence rate.

Summary of methodological effects

In summary, it is clear that many factors affect the validity and generalisability of survey findings. With regard to reporting of 'sensitive' material,) it seems there is god evidence that the use of more 'private' forms of data collection (i.e., computerised interviews where questions are posed and answers recorded solely by the computer) result in higher rates of reporting of such material. An interesting area for research, however, is the degree to which different modes affect the distress that participants may experience while participating in research on sensitive topics and how mode effects may exacerbate or ameliorate these effects.

Method

Literature search

Research on male victims of NVS was identified by searches of the MEDLINE, PsychINFO and EMBASE databases (see Appendix 1 for search terms). Journals with a high proportion of papers on NVS (e.g., The Journal of Interpersonal Violence) were also hand-searched.

Design

The research was comprised of two cross-sectional surveys (data from the very brief GP pilot study and the main GP study were conflated).

Sampling

The study comprised three samples: A very brief initial piloting of the interview in a GP surgry, an extended pilot study in a genitourinary medicine (GUM) clinic, and the main study conducted in a number of GP practices.

Pilot study in a GP practice

The computerised interview was initially piloted with a small number of participants (n=25) in a single GP clinic (in London) to assess for participant reaction to the research and any difficulties with using the computerised interview.

Genitourinary medicine clinic pilot study

Males attending a genitourinary medicine clinic (GUM) participated in this pilot study. A genitourinary medicine clinic was chosen for the 'main' pilot study as previous research demonstrates that the prevalence of NVS in males attending these clinics is relatively high (e.g., Keane et al, 1995; Petrak et al, 1994). Further, the genitourinary medicine clinic is a highly confidential setting where patients may expect to be asked questions of a sensitive nature. Finally, the setting affords the opportunity of immediate intervention/referral should a participant become distressed by participating in the research.

General practice surgeries

General practice was chosen for participant recruitment because it is known that the vast majority (more than 95%) of persons are registered with a GP. Further, general practice is a confidential setting where patients may expect to be asked questions of a sensitive nature, and which patients consider a safe and legitimate place to discuss issues of crime victimisation (Mezey, King and McClintock, 1998). Indeed, Mezey et al (1998) had already conducted a small, pilot study in a GP setting asking men about a history of NVS before this research commenced[1]. Finally, the setting affords the opportunity of immediate intervention/referral should a participant become distressed by participating in the research.

Participant safety and inclusion criteria

A number of steps were taken to maximise participant safety. First, the studies were conducted in environments where medical help was immediately available should a participant become distressed. Second, the voluntary nature of participation was stated on the information leaflet, verbally and by the computer. Third, participants were told verbally – and informed by the computer – that they were free to terminate the interview at any time. Fourth, all participants were given a sheet containing a list of helping agencies after completing/terminating the interview. Finally, only persons aged 18 or over were allowed to participate (age of participant was ascertained by verbal questioning).

Men who reported that they had reading difficulties were excluded from participating as this would have effectively led to two types of interview being performed (i.e., a CASI and a CAPI).

Instrument

Mode of inquiry

A computer administered survey interview was used in this study as this has been shown to lead to lead to higher rates of reporting of sensitive behaviours (e.g., Turner et al, 1998) and perhaps an increased rate of reporting of sexually abusive experiences in childhood (Bagley and Genuis, 1991). The interview 'shell' program produced by PORISM Ltd allows researchers to create interviews that run in a MicroSoft Windows

[1] The data were collected in 1992, although the findings were not published until after the data for this study had been collected

environment. The items and destinations of each question contingent upon given answers provided program were entered into this programme. The interview algorithm was then both black box (repeat testing of the interview in progress using a variety of different potential response patterns) and white box tested (repeat testing of the interview algorithm by tracing through a paper-based algorithm using a variety of potential response patterns). Both procedures ensured error-free running of the interview.

Interacting with the computer was simple as participants answered questions by entering numbers (presented next to response options) on the computer keyboard (the only exception being information on occupation which was entered as text for later coding into occupational class[2]).

Interview items

The CASI items were generated from a review of the literature (reviewed in the introduction) and from clinical experience of work with men who had experienced NVS and/or CSA.

The 'algorithm' (question order and 'branching structure') of the interview may be found in Appendix 2. The algorithm shows that the number of questions posed was contingent upon data entered by the participant. As such, the same questions were not posed to all participants (and thus numbers in results tables vary).

Conceptually, the interview was comprised of three parts:

- Inquiry about NVS (presence, characteristics, disclosure, mental health problems before and after NVS, and effects on sexuality)
- Inquiry about CSA (presence, characteristics and disclosure)
- Inquiry about assenting sexual experiences (ASE: presence and characteristics – see later for a description)

The interview items are described in outline here (see Appendix 3 for actual items). The interview began with a brief statement about the voluntary and confidential nature of the research and explained how participants could terminate the interview, and that

[2] Some men reported not being able to type and the researchers then entered this information

they were free to ask the interviewer questions at any time. This screen also stated that not every participant would be asked the same questions. [CASI item: Start]. Next, the interview posed three questions designed to demonstrate inputs to questions where the participant could choose from a number of responses options (i.e., choosing more than one item from a list) [CASI item: Example 1], a single response option to a question (e.g., when responding on a Likert scale) [CASI item: Example 2], and items where participants had to enter ages (i.e., participant's age, age at which experienced NVS, CSA, ASE) [CASI item: Example 3].

Demographic questions

Participants were asked to provide information about their marital status (GP sample only [CASI item: Partner?]), occupation [CASI item: Occupation], age [CASI item: DemoAge], and ethnicity (OPCS criteria [CASI item: Ethnicity]). Questions about ethnicity (subsequently coded as white/non-white) and occupation (subsequently coded as manual/non-manual occupational class) were asked to test relationships between these variables and reporting of reported sexual experience and mental health related variables.

Participants were also asked about their sexual orientation as this is an important variable in research on sexual coercion in men for (at least) two reasons:

1). There is evidence that men who report being homosexual or bisexual are more likely to report NVS (e.g., deVisser et al, 2003; Balsam et al, 2005).

2) There is much evidence that men who have sex with men (MSM) report more mental health problems than heterosexual men (King, McKeown, Warner, Ramsay, Johnson, Cort, Wright, Blizard and Davidson, 2003; Warner, McKeown, Griffin, Johnson, Ramsay, Cort and King, 2004; Jorm, Korten, Rodgers, Jacomb, Christensen, 2002). Thus, sexual orientation is an important potential confound when exploring relationships between NVS and mental health.

There are, however, a number of definitions of sexual orientation (Sell, 1997). A variation of the Kinsey scale (Kinsey, Pomeroy and Martin, 1948) was used in this study. Using this scale, participants labelled themselves as either:

- Gay (Homosexual)
- Gay, but sometimes fantasise about sex with women
- Gay, but sometimes have sex with women
- Bisexual
- Straight, but sometimes have sex with men
- Straight, but sometimes fantasise about sex with men
- Straight (Heterosexual)

Thus the scale allowed participants who labelled themselves as heterosexual to also be able to report sexual contact with men. The scale also afforded more 'sensitivity' (i.e., possible to assess for even 'single point' differences in sexuality) with regard to inquiries about changes in sexual orientation before experiencing NVS and at the time of participating in the study [CASI item: Sexuality].

Definition of NVS

As stated in the introduction no internationally accepted definitions of NVS, CSA or ASE exist. It is also the case that the meaning of various terms such as 'have sex' appears variable (e.g., Pitts and Rahman, 2001). Extant research on NVS either uses gate questions or a list of behaviourally specific questions. There is some evidence of lack of agreement between faith and face validity where such lists have been used (Layman et al, 1996). Two gate questions regarding NVS were used in this study. It was intended that the approach of following up a gate question with a second question would prompt further thought about the nature, and possibly recall, of unwanted sexual experiences.

In the absence of internationally accepted definitions of the sexual experiences of interest it was necessary to define these experiences for the purpose of this study. NVS was defined as [CASI item: NVS1]:

Unwanted sex is when:
A person(s) uses force –or other means– so that they can do sexual things to you that you did NOT want them to do
A person uses force – or other means– to make you do a sexual thing that you did NOT want to do
These things can be done by men and also by women.

Has anything like this happened to you SINCE YOU WERE 16?

This definition was chosen because:

- It was intended that the definition make it clear that the experience was unwanted
- It was intended that the term 'sexual things' would be broad enough to include a variety of sexual acts
- It made clear that the experiences of interest were those that involved acts perpetrated against the person and acts that the person was made to perform
- The definition made it clear it that perpetrators could be male and/or female
- It made it clear that the experience of interest happened in adulthood (i.e. aged 16 or older)

The follow-up question [CASI item: NVS2] was:

We want you to be sure what we mean by unwanted sexual experiences. Unwanted sexual experiences are things like:
Doing sexual things – or having sexual things done to you – because a person(s) threatened to harm you
Doing sexual things – or having sexual things done to you – just to get out of a dangerous situation
Have any of these things happened to you SINCE YOU WERE 16?

Thus, the second definition provided examples of some of the means alluded to in the first definition.

The interview branched at this point (according to whether the participant reported experiencing NVS). Men who did not report NVS were then posed questions about the presence of a list of mental health problems and help seeking for same since age sixteen.

Men not reporting NVS - Mental health problems and help-seeking

Men who report NVS report a wide variety of mental health problems. It was necessary therefore to ask men who did and did not report NVS about the presence of a variety of

mental health problems so that comparisons between victims and non-victims could be made. Information about mental health problems was obtained via non-standardised self-report[3] queries about the presence/absence of mental health problems. To be consistent with classification systems for mental disorder (e.g. DSM-IV (APA, 1994)) mental health problems were defined as 'troubles' that the participant had experienced for more than two weeks at any one time (i.e., not 'state' or very short term difficulties). The term 'troubles' was used as it was hoped that this would be seen as a less stigmatising term than 'problem', 'illness' or 'disorder' and thus encourage reporting. Men were asked to report any of the following difficulties experienced after age sixteen [CASI item: Troubles]:

- Nightmares
- Great difficulty sleeping
- Fear of men
- Anxiety
- Phobia
- Depression
- Emotional problems
- A sexual problem(s)
- A drug problem

If a participant reported experiencing any of these mental health problems since age sixteen they were asked if they had had any help from a variety of sources (including doctors, nurses, social workers, mental health professionals and whether they had received drug treatment and/or in an inpatient admission) [CASI item: Help].

Alcohol misuse

Alcohol misuse was assessed by posing the questions from an established questionnaire about the presence of at-risk drinking (the CAGE questionnaire: Ewing (1984)). [CASI item: CAGE]

[3] With the exception of questions about alcohol use

Deliberate self-harm

Deliberate self-harm was inquired about using (1) Behaviourally specific examples of non-accidental self-injury [CASI item: DSH1], and (2) direct questioning about number of suicide attempts [CASI item: DSH2]. It is accepted that examples of the former may constitute attempts of the latter.

At this point in the interview a screen appeared which thanked men for the information they had provided so far and also stated that the computer would now pose questions about sexual experiences participants may have had before age sixteen [CASI item: Child].

Men reporting NVS - Characteristics of NVS experiences

Sexual experience before experiencing NVS

NVS is sometimes the victim's first sexual experience with another person The interview posed a question about this possibility to participants [CASI item: NVS First].

Age at which NVS was experienced

Participants were asked to provide the age at which they first experienced NVS after age sixteen [CASI item: NVS Age].

Number of NVS experiences

The computer posed a question about the number of times the participant had experienced NVS (from one to more than five) [CASI item: NVS #]

From this point on[4] until questions about disclosure of NVS men in the GUM sample were asked to provide information about the only (or most serious time they experienced NVS. The most serious time was defined as 'The time that affected you the most'

[4] It was decided to change the definition after collecting data from the GUM sample to ensure that the full range of characteristics of NVS could be reported.

Number and gender of perpetrators

NVS is reported to be perpetrated by both men and / or women either individually or in pairs/groups. The interview posed a question about the gender and number of perpetrators of NVS [CASI item: Gender].

Sexuality of male perpetrators

NVS is reported to be perpetrated by heterosexual, bisexual and homosexual men. Where men reported NVS with a male the interview posed a question about whether the participant thought or knew the sexual orientation (heterosexual, bisexual, homosexual) of the male perpetrator(s) [CASI item: PerpOrient].

Alcohol use by victims of NVS

Some victims of NVS report being intoxicated when they experience NVS The interview posed a question about level of alcoholic intoxication during NVS as it was thought that this may be more useful than inquiring simply about whether the participant had been drinking in understanding the role of alcohol in these experiences. [CASI item: Alcohol].

Location of NVS experience

NVS is reported to occur in a variety of locations. The interview posed a question about different locations where NVS occurred including victim and/or perpetrator's home, outdoors and other public places [CASI item: Location].

Identity of perpetrators

NVS is reported to be perpetrated by a variety of persons. The interview posed questions about NVS perpetrated by a variety of persons including intimate partners, acquaintances, relatives and other person's [CASI item: Perpetrator]. If a relative was chosen from the list of perpetrators a further question regarding the identity of the relative was posed [CASI item: Relative]. If the category 'other' person was chosen from the list of perpetrators first presented the computer posed a question about NVS perpetrated by persons including teachers, medical staff and religious representatives [CASI item: Other].

Coercive strategies used by perpetrators

Victims report that perpetrators use a variety of coercive behaviours. The interview posed a question about coercive behaviours including threats/blackmail, use of alcohol or drugs, physical violence, tying or gagging and threats or actual use of weapons [CASI item: Coercion1; CASI item: Coercion2].

Victim's belief they may be killed during NVS

Victims report fear of being killed during NVS and the interview posed a question about such a fear [CASI item: Fear].

Victims' behavioural responses during NVS

Some victims report engaging in a variety of behaviours during NVS. The computer posed a question about the presence of behavioural responses such as 'freezing', negotiating with the perpetrator, shouting/screaming and fighting back [CASI item: Response].

Sexual acts performed by the perpetrator

Victims of NVS report a variety of sexual acts performed by perpetrators. The interview posed questions about a variety of sexual acts performed by perpetrators including masturbation (of the victim), fellatio, and rape. The slang term 'wanked' was used in brackets next to the term masturbation as it was felt that this term is common in usage and has a lower reading age [CASI item: Sex Acts1]

Sexual acts performed by the victim

Victims report being coerced into performing a variety of sexual acts during NVS. The interview posed questions about a variety of forced sexual acts including masturbation (of the perpetrator), orogenital contact and intercourse. The terms fellatio and cunnilingus were not used due to the possibility of unfamiliarity of the terms. Rather, participants were asked if they had been made to 'Suck a man's penis' or 'give a woman oral sex'. Participants were also asked if they had had to 'Fuck' a man and/or a woman. [CASI item: Sex Acts2]. Again, colloquial terms were used to aid understanding.

Genital responses

Victims report obtaining erections or ejaculating when they experience NVS. The interview asked if men got an erection or ejaculated during NVS [CASI item: Genital]

Injuries and sexually transmitted diseases obtained during NVS

Victims report a variety of injuries obtained during NVS as well as the acquisition of sexually transmitted disease(s). The interview posed questions about a variety of physical injuries (from cuts and bruises to life threatening injuries) and also whether the victim had contracted a sexually transmitted disease (the abbreviation VD was also used as it was thought that this abbreviation would likely be familiar to participants) [CASI item: Injury].

Help-seeking for injuries / sexually transmitted disease

Victims may not go for help and when they do they may take considerable time before obtaining help after experiencing NVS. The branching structure of the interview varied according to whether men got help after experiencing NVS.

1) Men who reported being injured or obtaining a sexually transmitted disease from NVS were posed a question about help from a variety of sources (e.g., doctor, hospital clinic) [CASI item: Medhelp]. Men who reported getting such help were posed a question about the length of time taken before obtaining help (from within twelve hours to more than a month) after experiencing NVS [CASI item: How soon?]
2) Men who did not report obtaining help after experiencing NVS were posed a question about why they had not done so (from options including being too embarrassed and not being believed) [CASI item: No medical]

All men who experienced NVS were then posed a question about whether they had told their GP about experiencing NVS [CASI item: Told GP?] and, if so, to provide a rating of the helpfulness of their GP on a Likert scale [CASI item: GP helpful?]. Men who reported that they had not told their GP were posed a question about whether they would tell their GP if their GP inquired about a history of experiencing NVS [CASI item: Tell ask?].

Finally, all men who experienced NVS were posed a question about help sought from number of agencies (e.g. the Samaritans, religious representative) for help after experiencing NVS [CASI item: Other help?].

Disclosure of NVS experiences

Few men disclose experiencing NVS. The interview posed questions about disclosure to a variety of persons (e.g., intimate partners, relatives, mental health professionals) within two weeks of experiencing NVS [CASI item: NVS Tell soon?] or subsequently [CASI item: NVS Tell ever?].

Mental health problems and help-seeking for same

Participants were posed questions about the presence of mental health problems[5] both before [CASI item: NVS Pre-Med] and after [CASI item: PostMed] experiencing NVS (or before and after the first experience of NVS if the participant had had more than one experience of NVS).

If a victim reported experiencing any of these mental health problems before experiencing NVS the computer posed a question about help from a variety of sources (including doctors, nurses, social workers, mental health professionals and whether they had received a drug treatment and/or in inpatient stay) [CASI item: NVS Pre-help]. Similarly, if victims reported any of these mental health problems after experiencing NVS the computer posed a question about help after experiencing NVS [CASI item: NVS Post-help]

Alcohol misuse and deliberate self-harm

The computer next posed questions regarding alcohol [CASI item: CAGE] and deliberate self-harm problems [CASI item: NVS DSH1; CASI item NVS DSH2] (with the age of experiencing these difficulties unspecified) as described previously.

Disclosure to the police and legal processes

Few men report their experience to the police and have reservations about being believed and/or involved in court proceedings. The branching structure of the interview varied according to whether men had reported experiencing NVS to the police.

[5] As such information was available only for the presence of at-risk drinking and DSH since the age of sixteen and it is not known if these problems preceded and/or followed NVS

The interview posed questions about whether the police had been informed [CASI item: NVS Police], and if so, participants were asked to provide a (Likert) rating of the helpfulness of the police [CASI item: Helpful?].

1) Participants who reported their NVS experience to the police were posed a question about whether the perpetrators had been apprehended [CASI item: Caught?].

If the participant reported that the perpetrator had been apprehended they were then posed a question about whether they had appeared as a witness in court [CASI item: Court]. Men who reported going to court were posed a question about the outcome of the court case (e.g., found not guilty, received probation or a prison term) [CASI item: Outcome] and, if the perpetrator had been sentenced, to provide a Likert rating of their satisfaction with the court's decision [CASI item: Satisfaction]. If a participant reported that he had not been to court even though the perpetrator had been apprehended the interview posed a question about why this may be the case (e.g., perpetrator pleaded guilty, charges were dropped) [CASI item: No court].

2) Victims who did not reported their NVS experience to the police were posed a question about their reasons(s) for not reporting (e.g., being too embarrassed, believing that the police don't care) [CASI item: Police no]

Sexuality before and after NVS

The material in the introduction shows that men report changes in their sexual behaviour/identity after experiencing NVS. The interview posed a question about sexual orientation before experiencing NVS based on the same scale used at the start of the interview [CASI item: Sexuality2]. This allowed a fairly 'fine-grained' comparison of sexuality before and after experiencing NVS. Victims were also posed a question about whether hey had ever felt unsure about their sexual orientation since the first (or only) time they had experienced NVS [CASI item: Confused?].

At this point in the interview a screen appeared which thanked men for the information they had provided so far and also stated that the computer would now pose questions about sexual experiences participants may have had before age sixteen [CASI item: Child].

Sexually abusive experiences in childhood

There is no authoritative definition of CSA. As stated previously, the perception of sexual experiences before age sixteen appear to vary as a function of the age of the child and the gender of the perpetrator. Accordingly, the interview posed questions about two forms of sexual experience before age sixteen:

- Experiences described/perceived as forced/coerced
- Experiences to which the boy assented before the age of sixteen, but which occurred with a person five or more years older as this age difference is commonly used in defining sexual contact between those under and over sixteen as sexually abusive (e.g., Nelson et al, 2002: it was intended that such a definition would exclude assenting sexual contact with peers)

To reiterate, both these sexual experiences are considered abusive, but for the purpose of identification they are referred to in this thesis as childhood sexual abuse (CSA) and assenting sexual experience (ASE) respectively.

Child sexual abuse

Definition of CSA

The definition of CSA was identical to the wording of the first question about NVS:

Before you were sixteen did you have any UNWANTED sexual experiences?

Unwanted sex is when:
A person(s) uses force –or other means– so that they can do sexual things to you that you did NOT want them to do
A person uses force – or other means– to make you do a sexual thing that you did NOT want to do
These things can be done by men and also by women.
Has anything like this happened to you BEFORE YOU WERE 16? [CASI item: CSA]

This definition was chosen for the same reasons as outlined for the NVS definition outlined above. A follow-up question regarding unwanted sex under age sixteen was not used as it was considered that the meaning of unwanted sexual experience under the age of sixteen was less ambiguous than the meaning of unwanted sexual experience in adulthood.

The interview branched at this point depending on whether the participants reported CSA, ASE, both CSA and ASE or neither CSA nor ASE. Men who did not report CSA were next posed a question about ASE. The mental health and help-seeking questions were posed after queries about CSA and ASE and reporting of any information about these experiences (see interview algorithm Appendix 2).

Number of sexually abusive experiences, variety of perpetrators and duration of childhood sexual abuse

Participants were posed a question about the number of times they experienced sexually abusive experiences in childhood (from one to more than twenty times) [CASI item: CSA#]. Participants who reported more than one CSA experience posed a question about whether the same perpetrator was involved on all occasions [CASI item: CSA same?]. Participants who reported more than one CSA experience were posed a question about the length of time over which the CSA occurred (from one week to more than two years) [CASI item: CSA period].

Number and gender of perpetrators of CSA

Childhood sexual abuse is reported to be perpetrated by both men and / or women either individually or in pairs/groups (see Holmes and Slap, 1998). The interview posed a question about the gender and number of perpetrators of NVS [CASI item: CSA Gender]

Perpetrator identity

A wide variety of persons are reported to perpetrate child sexual abuse (Holmes and Slap, 1998). The interview posed questions about a variety of perpetrators including relatives, strangers, and neighbours [CASI item: CSA Who?]. Men who indicated a perpetrator who was a relative were posed a follow-up question about the identity of the relative [CASI item: CSA relative].

Age first experienced CSA

Participants were posed a question about the age at which they first experienced childhood sexual abuse [CASI item: CSA age].

Genital responses

The interview posed a question about the presence of erection or ejaculation in the participant when they experienced childhood sexual abuse [CASI item: Genital2].

Perpetrator's coercive behaviours

Victims of child sexual abuse report that perpetrators use persuasion/inducement, threats, physical harm and weapon use when perpetrating child sexual abuse (Holmes and Slap, 1998). The interview posed questions about various coercive behaviours of perpetrators including persuasion/bribery, use of substances, threats of harm and harm [CASI item CSA Coer1]; [CASI item: CSA coer2].

Perpetrator's sexual acts

Victims of child sexual abuse report that perpetrators perform a variety of sexual acts (Holmes and Slap, 1998). The interview posed questions about a variety of sexual acts including genital touch, orogenital contact and rape [CASI item: Sex acts 3]. Colloquial terms were again used with the intention of improving understanding.

Sexual acts victim made to perform

Victims of child sexual abuse report being made to perform a variety of sexual acts (Holmes and Slap, 1998). The interview posed questions about a variety of sexual acts the victim was forced to perform including masturbating the perpetrator, orogenital contact and penile penetration of a male or female (CASI item: Sex acts 4). Colloquial terms were again used with the intention of improving understanding.

Disclosure of childhood sexual abuse

Many victims do not disclose their experience of childhood sexual abuse (Golding et al, 1989). The interview posed questions about disclosure of CSA to a variety of persons (including family members, friends, professionals) within a month of the first experience of CSA [CASI item: CSA month] and subsequently [CASI item: CSA ever].

Police involvement and court appearances

Few male victims of CSA report the experience(s) to the police (Holmes and Slap, 1998). Participants who reported child sexual abuse were asked if the police had been informed about the sexual abuse [CASI item: CSA police]. Participants who reported that the police had been informed were asked if they had given evidence in court [CASI item: CSA court].

Assenting sexual experiences

Research demonstrates that not all sexual experiences with older persons in childhood are considered abusive by the child (Fromuth and Burkhart, 1987). To test for the effects of such experiences another question about sexual experiences in childhood was posed to participants. The definition of ASE stressed the 'wanted' nature of the experience and the five year age gap between the participant and the perpetrator [CASI item: Assent]:

Sometimes people under 16 choose to do sexual things with other people. Before you were sixteen did you ever DO any sexual things that you WANTED TO DO with a person who was FIVE OR MORE years older than you?

Participants who reported ASE were asked about the identity and gender of the perpetrator and the nature of the sexual act(s) experienced. Those who did not report ASE were then posed questions about mental health problems and help-seeking for same before age sixteen.

Age and identity of perpetrator

Participants who responded in the affirmative to the inquiry about ASE were asked how old they were when they first did sexual things with this person [CASI item: ASE age], and also asked to provide the identity of the perpetrator [CASI item: ASE Who]. Men who reported ASE with a relative were asked about the identity of the relative [CASI item: ASE family].

Perpetrator gender and sexual acts

Men who reported ASE were asked to indicate the gender of the perpetrator [CASI item: ASE gender] and also to indicate which sexual acts took place (from a list

including genital touch, orogenital contact and sexual intercourse: [CASI item: ASE sex acts]).

Mental health problems in childhood

Victims of chid sexual abuse report a variety of mental health and behavioural problems (Holmes and Slap, 1998). The interview posed questions about an almost identical list of 'troubles' experienced before sixteen (drug and sexual problems were excluded and nocturnal enuresis – described as 'bedwetting' – was included [CASI item: CSA Symptoms]. If participants reported any of the list of problems inquired about they were asked if they had got any help for same (from an identical list of sources to that inquiring about help post sixteen [CASI item: CSA child help].

At the end of the interview a screen appeared which thanked men for their time, told them to press a special button to cease the interview and to inform the researcher that they had finished the interview [CASI item: End].

Procedure

Recruitment of GUM Clinic

One GUM clinic in North London was approached and agreed to participate in the study.

Recruitment of General Practices

Lists of General Practices were obtained from 20 Health Authorities throughout England. To increase the possible pool of persons who were available for recruitment at any one time only practices with five or more General Practitioners received letters informing them about the study and inviting them to take part. It was hoped that these larger practices would have a greater number of men attending on any given surgery session and this would increase the number of men who could be recruited into the study. Letters were sent to 300 such practices throughout England (i.e., the first fifteen practices meeting the size criteria and ensuring some 'geographical spread' within each authority).

Initial piloting of interview

Piloting was first conducted on a small sample (25) of men in General Practice. A male researcher collected the data during surgery hours between Monday and Friday.

Participants appeared to be interested in the research, were not obviously offended by its theme, made no adverse comments, and no adverse incidents were reported. After this, the second piloting stage took place in the GUM clinic. As with the GP pilot study, participants appeared to be interested in the research, were not obviously offended by its theme, made no adverse comments, and no adverse incidents were reported.

Recruitment of participants
All participants in the GUM sample were recruited by a male researcher. Recruitment in the GUM clinic took place throughout the day Monday to Friday (including a clinic that closed at 8 p.m. on Thursday). Recruitment in the GUM clinic lasted approximately six weeks.

Participants in the GP sample were recruited by a male or a female researcher. Recruitment in the GP surgeries took place during morning and evening surgery from Monday to Friday. Recruitment in the GP surgeries lasted approximately twelve months.

Consecutive patients at either the GUM clinic or GP surgeries were approached in the waiting room after registering their arrival with the receptionist and asked if they were over 18. If they indicated that this was the case they were given a brief participant information sheet that gave details of the study. The information sheet (Appendix 4) outlined the study, described its nature and reassured participants that the research was anonymous and confidential. Men who agreed to participate were taken to the private room either before or after their consultation with GUM staff or the GP (based on their preference)[6]. At 'busy' times in the GUM clinic or GP surgery some men were recruited while another participant was completing the interview in a private room. These men either completed the interview as soon as the previous participant had finished or completed it after seeing GUM staff or the GP. No demographic information was obtained from men who were approached, but declined to participate.

After entering the private room, participants were then shown how to operate the computerised interview which was presented by a laptop computer. This involved explaining how to respond to single or multiple response items and how to enter digits to input various ages. Participants were also asked to provide details of their

[6] Some men were called to the GP while completing the interview

occupation. This was entered using the keyboard, and was the only text entry required[7]. The men were directed toward a button on the keyboard marked END (a sticker over the # key) and told that they were free to end the interview without explanation at any time by pressing this key.

After demonstrating the interview the researcher either left (but stayed within earshot to help if required) or stayed in the room[8] in a position where the laptop screen was not visible to them. If called to assist, the researcher stressed the confidentiality and anonymity of the participant's responses before answering queries.

The computer informed participants when the interview was complete. At this point the researchers thanked each participant, and gave them a sheet containing a list of agencies that provide help to men who have experienced NVS or CSA and a contact address for queries or comments about the research (Appendix 5).

Interviews (defined as the time between entering and leaving the interview room) ranged in time from approximately five minutes to approximately twenty minutes. There was wide variation in interview times due to the number of experiences reported by men, the number of questions they asked before taking part in the study, comments they made during or after the interview and general speed of using the computer (which, anecdotally, was slower in older men who reported being less computer literate).

Test-retest reliability study

The test-retest reliability was conducted in the GUM clinic as it was thought that a high proportion of men would be repeat attendees (e.g., having to return to the clinic for the results of tests etc.). Two weeks after data collection commenced in the GUM clinic consecutive attendees were asked if they wished take part in the study or if they would be prepared to complete a second interview if they had already taken part. Men who indicated a willingness to complete a second interview were asked the date of their previous visit to the clinic and if their age or occupation had changed between visits (this was necessary as initial and repeat interviews were matched based on the dates of the interviews and the respondent's age, ethnic background and occupation). Men who

[7] In practice many men who reported not being able to type asked the researcher to enter this data
[8] Staying or leaving the room was predominantly contingent upon whether there was sufficient room and/or the seating arrangement was such that participant's responses could remain private.

completed a second interview were given £5 compensation for their time. No information was obtained from men who initially completed the interview, but declined to take part a second time.

Data combination

Combination of data from variables into categories

NVS/CSA/ASE related variables
Due to the possibility of small cell-sizes, and to aid clarity of data presentation, the data pertaining to sexually abusive experiences were sometimes combined into categories. The results section describes such combinations immediately before presenting the combined data (except in cases where such combination is relatively minor and indicated in the relevant data table).

Mental health-related variables
Three strategies were employed to give analyses of the relationship between abusive experiences and mental health problems (and help-seeking for same) more statistical power and hence reduce the likelihood of Type II errors when testing for significant associations or predictor variables. The first strategy was to combine the data from both samples[9]. The second strategy was to combine the data from men reporting NVS with either a male or a female into one single NVS category. The third strategy was to combine similar mental health problem and help-seeking *variables* into a smaller number of *categories*.

Mental health categories
The categories for problems reported *after 16* were:

- Psychological disturbance (reporting any of fear of men, anxiety/panic, phobia, depression, emotional problems, nightmares, insomnia)
- A sexual problem

[9] This meant that it was not possible to use marital status (as data were only available for the GP sample on this variable) or area (i.e., rural/small town vs. inner city as the GUM clinic data were obtained from only one clinic based in London) or interviewer gender (all GUM participants interviewed by a male) as potential confounds in the logistic regressions.

The interview also posed questions about the presence of various problems for which no age of onset was specified. These were also conflated into a smaller set of categories:

- Substance use problems (reporting any of drug problem, and/or CAGE questionnaire score of >=2)
- Deliberate self harm (reporting of any form of self-harm and/or attempted suicide)

Mental health problems *before* age sixteen (fear of men, anxiety/panic, phobia, depression, emotional problems, nightmares, insomnia, and enuresis) were combined into a single variable referred to as psychological disturbance.

Help-seeking categories

A similar strategy was used to combine sources of help received (before and after sixteen) into smaller categories:

- Help from a doctor
- Help from other source (social worker, nurse 'other')
- Mental health professional (counsellor, therapist, psychologist, psychiatrist)
- 'Medical intervention' (prescription drugs, inpatient stay)
- Any help (any of the above)

Data analysis

Univariable analyses - categorical data

The kappa (κ) was used to assess for significant agreement between first and second interviews in the test-retest reliability evaluation. The kappa (κ) test was used as percentage concordances tend to overestimate agreement because of the high probability of agreement by chance. Conventionally, κ values of less than 0.2 are regarded as demonstrating poor agreement; 0.2-0.4 is "fair"; 0.4-0.6 is "moderate"; 0.6-0.8 is "good", and values over 0.8 indicate very good agreement.

The χ^2 (or Fishers exact where expected frequencies were less than 5) test was used to test for associations between categorical variables. Linear trends were examined using the Mantel-Haenszel χ^2 test (hereafter referred to as MH χ^2).

Univariable analyses - interval/ratio scale data
Parametric (e.g., t test or ANOVA) or non-parametric procedures (e.g., Mann-Whitney test) were applied to the data as appropriate.

Interviewer effects
Interviewer effects on recruitment and reporting were investigated using univariable analyses as follows:

- Differential recruitment of participants according to demographic factors/area of recruitment
- Differential reporting of sexual experiences
- Differential reporting of characteristics of sexual experiences

Data from these analyses are provided at the end of the relevant results sections.

Hierarchy of sexually abusive experiences used for univariable analyses of mental health problems
There is evidence that the effects of sexually abusive experiences in childhood are severe and persist in adulthood (Kendall-Tackett, Williams and Finkelhor (1993). There is also evidence that CSA involving intercourse is more strongly associated with mental health problems than is sexual abuse not involving intercourse (even after controlling for other adverse childhood experiences Dube, Anda, Whitfield, Brown, Felitti, Dong, and Giles, 2005). Further, there is evidence that cumulative experiences of unwanted sex (i.e., both adult and child) are associated with severe psychopathology (Follete, Polusny, Bechtle and Naugle, 1996). In light of these findings the following hierarchy of reported experiences was created:

- Persons reporting CSA (involving orogenital contact[10] and/or intercourse) *and* those reporting both CSA and NVS (irrespective of ASEs in both cases)
- Persons reporting CSA (*not* involving orogenital contact and/or intercourse) *and* those reporting both CSA and NVS (irrespective of ASEs in both cases)
- NVS experiences in adulthood (irrespective of ASEs) comprised the next level of the hierarchy since, by definition, they involved a degree of coercion

[10] Orogenital contact was included as it was deemed to also represent a very severe form of CSA

- ASEs comprised the next level of the hierarchy as it was felt necessary to assess the effects of these illegal sexual experiences on mental health outcomes even though they were considered to be consensual by participants
- The final (lowest) level of the hierarchy was comprised of men who did not report NVS, CSA or ASE.

Thus, testing for linear trends (using the Mantel-Haenszel χ^2 test) involved comparisons between men categorised into five levels of severity of reported experiences. Analyses were conducted on data from the GUM and GP samples combined (as subsequent multivariate analyses of independent predictors of mental health problems/help-seeking controlled for sample).

A similar hierarchy was used to test for help-seeking for mental health problems with the exception that the two CSA severity variables were combined into one CSA variable as it was expected that few men would have sought help and cell sizes would be small.

Linear trend and crude odds ratio data for mental health problem categories and help seeking for men who experienced NVS were based on conflated data from reports of mental health problems experienced before and after NVS.

Multivariable analyses

Multivariate statistical analyses (logistic regressions) were performed in attempts to identify significant predictors of

- Various categories of mental health problems
- Help seeking for mental health problems
- Re-victimisation (reporting of sexually abusive experiences in childhood *and* NVS)

Potential confounders of the independent/dependent variable prediction were identified by performing χ^2 tests, t-tests, or ANOVAs as appropriate. Only those confounders associated with *both* the dependent and independent variables at $p < 0.10$ or less (or where age differed at $p < 0.10$ or less) were included in logistic regression analyses.

Multivariable analyses of predictors of mental health problems after age 16 and help-seeking for same

The procedure described above was used to test whether the following independent variables:

- CSA(1) involving orogenital contact and/or intercourse
- CSA(2) not involving orogenital contact or intercourse
- NVS
- ASE

were significant predictors of categories of mental health problems (as described above) and help-seeking for same after controlling for the following possible confounders:

- Age
- Ethnic group (white vs. non-white)
- Occupational class (manual vs. non-manual worker)
- Sexuality (Reporting of male sexual partners vs. heterosexual only)
- Sample (GUM Clinic/GP surgery) as it is known that rates of psychological disorder in GUM patients are very high (Osborn, King and Weir, 2002).
- Mental health problems before age 16 (This dummy variable was created by a positive response to any of mental health problem from the list provided since it is known that mental health problems in childhood are associated with mental health problems in adulthood – see Hersen and Last (1990) for a through review).

Multivariable analysis of predictors of any sexual revictimisation

As stated above more severe CSA is more strongly associated with revictimisation. Further, there seems evidence that young men and men who report male sexual partners may be at increased risk of revictimisation. Thus, the data analysis procedure described above was used to test whether the following independent variables:

- CSA(1) involving orogenital contact and/or intercourse
- CSA(2) not involving orogenital contact or intercourse

- ASE
- Sexuality (Reporting of male sexual partners vs. heterosexual only)
- Age

were significant predictors of re-victimisation (NVS) after controlling for the following possible confounders:

- Ethnic group (white vs. non-white)
- Occupational class (manual vs. non-manual worker)
- Sample (GUM Clinic/GP surgery).

Multivariable analysis of predictors of rape as defined by the SOA 2003
As stated above more severe CSA is more strongly associated with the experience of rape. Further, there seems evidence that young men and men who report male sexual partners may be at increased risk of revictimisation. Thus, the data analysis procedure described above was used to test whether the following independent variables:

- CSA(1) involving orogenital contact and/or intercourse
- CSA(2) not involving orogenital contact or intercourse
- ASE
- Sexuality (Reporting of male sexual partners vs. heterosexual only)
- Age

were significant predictors of rape as defined by the SOA 2003 after controlling for the following possible confounders:

- Ethnic group (white vs. non-white)
- Occupational class (manual vs. non-manual worker)
- Sample (GUM Clinic/GP surgery).

The ENTER procedure was used to force all appropriate confounders and relevant independent variables into the logistic regressions.

Data presentation and commentary
As is stated above, the interview inquires about three types of experiences. The data from each of these three areas is broken down into sub-sections within each area and each section contains a small summary.

Sample sizes for each analysis are provided in subscripts in each table. The per cent figure relating to a particular n is presented in brackets below that n. All percentage figures are rounded[11] (except for prevalence of sexual experiences where actual per cent figures and 95% confidence intervals are presented).

The number and per cent of responses in tables may not equal exactly 100% because of the possibility of multiple responses and/or rounding errors.

The tables that follow contain data from both the GUM sample and the GP sample (shaded). ***However, no statistical analyses were performed on differences between the GUM and GP samples since there was no aim to compare differences between the two samples.*** In all relevant tables that follow the symbols ♂ and ♀ are used to indicate male or female ***perpetrator gender*** (cases that involved men and women were coded into NVS with males).

Multivariable analysis data tables contain both the crude (odds ratio from the univariable analysis) and adjusted odds ratios (odds ratio from the multivariable analysis).

All data were analysed using SPSS.

Ethical approval

The Royal Free Hospital Research Ethics Committee approved this research.

[11] Per cents less than 0.5 rounded down and per cents greater than or equal to 0.5 rounded up.

Results

Ethical issues/research problems

Despite the potentially distressing nature of the research no formal complaints about the research were made by participants. Indeed, anecdotally, a number of men reported that the research was 'a good idea'. One man who said that he had reported a sexual assault also stated that taking part had made him realise that he must not be the only man who had ever been sexually assaulted by another man.

The computerised interview proved to be simple to use with few men seeking clarification in how to use the computer. A software problem meant that some data (relating to 'many of many' responses) from one general practice were incomplete, however.

Part 1 Test-retest reliability

Response rate

Twenty-two of fifty eligible[1] (44% response rate) men took part in the test-retest reliability study. The mean time between interviews was 18 days (SD=3).

Demographic variables

Reported age, occupational class (coded as manual vs. non-manual using the OPCS criteria), ethnic group (using the OPCS criteria) and sexuality (using the modified Kinsey scale) did not differ between interviews. Thus reliability for these items was perfect.

Reported sexual experiences

Per cent agreements for sexual experiences were all above 90% (Table 32).

[1] Men who reported having already completed the interview on a previous occasion

Table 32 *Test-retest data for reporting of sexually abusive experiences*

	% Agreement	kappa (p value)
NVS[$]	95% (21/22)	n/a
CSA	100 (17/17*)	n/a
ASE	100 (16/16*)	n/a

$ data from first and second NVS question combined

*n < 22 because not all men completed the second part of the interview.

Kappa statistics relating to the agreement between first and second interview could not be conducted because there was insufficient variability in the data to apply the test. The reasons for this are as follows:

NVS

There were no participants who reported NVS at time 2 and not at time 1 (In fact, only one person responded differently to this item. This participant responded in the affirmative regarding NVS on the first question, but in the negative at second interview. After terminating the interview the participant reported that he must have made an error entering his data as he realised that he was not asked the same questions the second time around. Thus, there was an empty 'cell' which made calculating kappa impossible. Overall, four men reported NVS (responses to both NVS questions combined), with three reporting NVS at both interviews.

CSA/ASE

There no changes in reporting of these experiences (all negative at both time points meaning kappa could not be computed due to empty 'cells')

Mental health problems and help-seeking in adulthood

Test-re-test reliability data were computed for the mental health *categories* as described in the method section. Only eighteen men[2] provided data on mental health problems experienced after age sixteen (time of onset not specified for CAGE questionnaire or

[2] There were no reliability data regarding MHPs from men who reported NVS. This was because one man stopped the interview after he realised he had made a mistake and was not being asked the same questions at second interview. Two men completed the second interview, but not the first. Finally, one man completed the first interview, but not the second.

questions regarding deliberate self-harm). Per cent agreements were all above 90% (Table 33).

Table 33 *Test-retest data for psychological problems*

Mental health problem	% agreement	Kappa (p value)
Psychological disturbance	94% (16/18)	0.64 (0.004)
Sexual problem	100% (18/18)	n/a
Substance misuse	100% (18/18)	n/a
Deliberate self harm	94% (17/18)	n/a

As with the data regarding sexual experiences, the kappa statistic could only be applied to the category psychological disturbance due to perfect reliability/empty 'cells' which made calculating kappa impossible.

Only six men reported mental health problems that prompted inquiry about help-received. There was perfect agreement between reports of help received on both interview administrations from doctors (three men), a counsellor (1 man), a social worker (1 man), and an inpatient stay (1 man).

Mental health problems and help-seeking in childhood

Test-retest reliability data were computed for the mental health category outlined in the method. Only sixteen men provided data on mental health problems experienced before age sixteen and there was perfect agreement between interview responses on both occasions (meaning that kappa could not be calculated).

Only three men reported mental health problems that prompted inquiry about help-received. Two men reported seeing a doctor on both interview occasions with one man reporting seeing a doctor at second interview administration only.

Summary of test-retest reliability evaluation

Although numbers were small, per cent agreements were significant There was perfect agreement between the number of men who sought help and the sources of help received regarding mental health problems after age sixteen (or time unspecified for

drug/alcohol problems and deliberate self-harm), although numbers were very small. The reporting of help received for mental health problems in childhood may be less reliable than that received for adult or lifetime experience of mental health problems.

Part 2 NVS Response rates and demographics

Dates of field work, response rates, participation rates, interview completion rates and participant demographics

Dates of fieldwork

The data were collected at the following times:

- June, 1995: Small GP pilot
- July-September, 1995: GUM Pilot
- September 1995-December 1996: main study in GP practices

Response rate: general practices

Eighteen General Practices (response rate of 6%) expressed a willingness to take part in the research. Eleven practices were in cities (nine in London and two in Manchester), three in small towns (Woking, Cleethorpes and Haslemere) and four in rural areas (two in Surrey and two in Hampshire).

Participation rate

Both samples achieved relatively high response rates (GUM 87%: 224/257; GP 79%: 2474/3142). The mean age of participants was lower in the GUM sample (31; SD = 8) than in the GP sample (46; SD = 17).

Interview completion rate

The interview completion rate in the GP sample (2339/2468; 95%) was higher than in the GUM sample (201/224; 89%). The completion rate of the NVS section of the interview was higher in the GP sample (61/71; 86%) than in the GUM sample (28/40; 70%).

Area of recruitment

Virtually identical numbers of men were recruited from rural areas\small towns (1236; 50%) and inner cities (1238; 50%).

Ethnic background of participants

Men from a wide variety of ethnic backgrounds were recruited into the study. More men in the GUM sample reported being non-white (Table 34).

Table 34 *Ethnic background of participants*

Ethnicity	**GUM_{224}** (n (%))	**GP_{2472*}** (n (%))
White UK	125 (56)	2164 (88)
White other	34 (15)	126 (5)
Black African	11 (5)	20 (1)
Black Caribbean	18 (8)	45 (20
Black UK	21 (9)	20 (1)
Indian	3 (1)	34 (1)
Pakistani	0	9 (<1)
Bangladeshi	1 (<1)	2 (<1)
Chinese	0	2 (<1)
Other	11 (5)	50 (2)

* Two men refused to give information about their ethnic background

Sexuality of participants

The proportion of heterosexual men in the GP sample was greater than in the GUM sample (Table 35).

Table 35 ***Sexuality in the GUM and GP samples***

Sexuality	**GUM_{224}** (n (%))	**GP_{2470*}** (n (%))
Homosexual	33 (15)	35 (1)
Homosexual, but sometimes fantasise about sex with	5 (2)	6 (<1)
Homosexual, but sometimes have sex with men	1 (<1)	4 (<1)
Bisexual	7 (3)	18 (1)
Heterosexual, but sometimes have sex with	4 (2)	15 (1)
Heterosexual, but sometimes fantasise about sex with women	10 (5)	72 (3)

Sexuality	GUM_{224} (n (%))	GP_{2470*} (n (%))
Heterosexual	164 (73)	2320 (94)
Participant has sex with men [3]	50 (22)	78 (3)

* Four men gave no information about their sexuality

Sexuality in different age groups

In the GP sample younger men were more likely to report having male sexual partners than were older men[4] (MH $\chi^2$1 d.f. = 6.34, $p < 0.05$: Table 36).

Table 36 *Reporting of male sexual partners in age bands in the GP sample*

Age group	*18-24$_{258}$* *n (%)*	*25-34$_{535}$* *n(%)*	*35-44$_{452}$* *n(%)*	*45-54$_{420}$* *n(%)*	*55-64$_{377}$* *n(%)*	*65-74$_{293}$* *n(%)*	*75-94$_{128}$* *n(%)*
Participant reports male sex partners	11 (4)	22 (4)	17 (4)	12 (3)	6 (2)	6 (2)	3 (2)

Occupational class of participants
The proportion of manual and non-manual workers in the GUM and GP samples was very similar (Table 37).

Table 37 *Occupational class of participants*

Occupational class	GUM_{224} (n (%))	GP_{2468} (n (%)
Non-manual	131 (59)	1439 (58)
Manual	78 (35)	873 (35)
Not classified[5]	15 (7)	162 (7)

Marital status of participants
The majority of men in the GP sample were married (Table 38)

[3] Straight and straight but sometimes fantasise about sex with men vs. Straight but sometimes have sex with men, Bisexual, Gay but sometimes have sex with women, Gay but sometimes fantasise about sex with women, Gay

[4] This analysis was conducted on the GP sample only since the age range of the GUM (18-58) sample was much smaller than that of the GP sample (18-88).

[5] Gave no occupation, reported 'unemployed' or 'retired', or could not be classified

Table 38 Marital status of men in the GP sample[6]

Marital status	GP_{2215} (n (%))
Married –lives with wife	1299 (59)
Married – does not live with wife	77 (4)
Lover or sexual partner that lives with	291 (13)
Lover or sexual that does not live with	271 (12)
No partner	326 (13)

Differential recruitment by interviewers

The reader is reminded that two interviewers collected the study data (a white male and a black female; both approximately the same age). The female interviewer recruited slightly more men than the male interviewer (51%; 1265/2474).The female interviewer recruited significantly more men from town/inner city areas and more single men. The male interviewer recruited significantly more white men and significantly more manual workers. The interviewers did not recruit significantly different proportions of men who reported sex with men (Table 39).

Table 39 *Differential recruitment by interviewers*

Variable	♂ interviewer (n (%))	♀ interviewer (n (%))
Town/inner city area	390 (24)	1217 (96)[1]
Manual worker	486 (43)	387 (33)[2]
Participant not in a relationship	131 (11)	195 (19)[3]
White ethnic group	1186 (98)	1104 (87)[4]
Heterosexual participant	1173 (97)	1219 (96)[5]

1: $\chi^2_{1\,d.f.} = 1110$, $p < 0.000$; 2: $\chi^2_{1\,d.f.} = 24.4$, $p < 0.001$; 3: $\chi^2_{1\,d.f.} = 26.3$, $p < 0.001$; 4: $\chi^2_{1\,d.f.} = 109.3$, $p < 0.000$; 5: $\chi^2_{1\,d.f.} = 1.9$, NS a: n= 2474; b: n = 2312; c: n = 2202; d: n = 2472; e: n = 2470

The age of men recruited by the male (mean 45; SD 17) and female interviewers (mean 46; SD 17) did not differ significantly ($t_{2463} = 1.6$, NS).

[6] No data for GUM sample and data missing for one site where data collected.

Part3 Prevalence and characteristics of NVS

Prevalence of NVS

This section of the results provides information on the prevalence of NVS and associations between NVS and demographic and sexuality variables. GUM participants reported a higher rate of NVS than did GP participants (Table 40).

Table 40 *Prevalence of NVS*

	GUM_{224} (n (%))	**GP_{2474}** (n (%))
Prevalence of NVS	40 (18) (95% CI 13-23)	71 (2.8) (95% CI: 2.2-3.6)

Age, sexuality, occupational class, ethnic group, partner status and NVS

The prevalence of NVS in the GP sample was assessed according to age group. This analysis revealed that younger men were significantly more likely to report NVS than were older men (MH $\chi 2$ 1 d.f. = 8.1, $p < 0.005$: Table 41).

Table 41 *Prevalence of NVS in various age groups*

Age group	***18-24$_{258}$*** *n(%)*	***25-34$_{536}$*** *n(%)*	***35-44$_{452}$*** *n (%)*	***45-54$_{421}$*** *n (%)*	***55-64$_{377}$*** *n (%)*	***65-74$_{293}$*** *n (%)*	***75-94$_{128}$*** *n (%)*
Report of NVS	11 (4)	18 (3)	18 (4)	9 (2)	13 (3)	2 (1)	1 (1)

The prevalence of NVS was significantly greater in men who reported male sexual partners (MSM) in both the GP (MSM 17%; heterosexual men 3%; OR 7.3, $p < 0.000$; 95% CI 3.7-14.2) and the GUM samples (MSM 38%; heterosexual men 12%: OR 4.5, $p < 0.000$; 95% CI 2.2-9.3).

The prevalence of NVS did not differ significantly according to occupational class in either the GP (manual 3%; non-manual 3%: OR 0.98; 95% CI 0.9-1.6) or the GUM samples (manual 18% vs. non-manual 17%; OR 0.92; 0.4-1.9).

The prevalence of NVS did not differ significantly according to ethnic group in either the GP (non-white 2%; white 3%: OR 0.98; 95% CI 0.9-1.6) or the GUM sample (non-white 22%; white 16%: OR 0.71; 95% CI 0.4-1.9)

The prevalence of NVS did not differ according to whether participants did or did not report a current intimate partner[7] (GP sample only: has an intimate partner 15%; no intimate partner 14%: OR 0.9; 95% CI 0.4-1.9).

Section summary

The NVS rate was higher in the GUM sample. Younger men in the GP sample were more likely to report NVS. NVS was significantly associated with reporting male sexual partners, but not with occupational class or ethnic group (or with having an intimate partner in the GP sample).

Characteristics of NVS experiences

This section provides details on when and where NVS experiences took place, the gender of the perpetrator(s) and the acts committed by the perpetrator and the victim. The reader is reminded that GUM and GP participants were asked different questions about NVS experiences up until disclosure of NVS.

NVS as first sexual activity with another person

NVS was the first experience of sexual activity with another person for forty per cent of men in the GP sample who reported NVS with a male (Table 42).

Table 42 *Perpetrator gender and NVS as first experience of sexual activity with another person*

NVS was first sexual experience with another person	GUM ♂22 (n (%))	GUM ♀18 (n (%))	GP ♂40 (n (%))	GP ♀30 (n (%))
Yes	7 (32)	6 (33)	16 (40)	5 (17)

Gender of perpetrators of NVS

Overall, the proportion of male perpetrators in both samples was similar (Table 43).

[7] Wife, and (!)/or lover/sexual partner

Table 43 *Gender of perpetrators of NVS*

Perpetrator(s)	**GUM_{40}** (n (%))	**GP_{70}** (n (%))
One man	18 (45)	35 (49)
More than one man	3 (8)	3 (4)
One woman	13 (33)	28 (38)
More than one woman	5 (13)	3 (4)
Man and a woman	1 (3)	1 (1)
Group of people including men and women	-	1 (1)
Male perpetrator	22 (55)	40 (57)
Female perpetrator	18 (45)	30 (43)

Sexuality of male perpetrators

Participants who reported experiencing NVS with a male(s) were asked about the sexuality of the male(s) involved. There appears to be a trend for participants being more likely to think than to know about the sexuality of the male perpetrator(s) (Table 44).

Table 44 *Participant's report of the sexual orientation of male perpetrator(s)*

Report of perpetrator sexuality	**GUM_{22}** (n (%))	**GP_{39}** (n (%))
Thought the man was homosexual	11 (50)	11 (28)
Thought the man was heterosexual	1 (5)	2 (5)
Thought the man was bisexual	4 (18)	10 (25)
Thought it was a mixture of homosexual\heterosexual\bisexual men	-	2 (5)
Knew the man was gay homosexual	4 (18)	-
Knew the man was heterosexual	-	6 (15)
Knew the man was bisexual	-	2 (5)
Knew it was a mixture of Homosexual\heterosexual\bisexual men	-	1 (3)
No idea of perpetrator sexuality	2 (9)	5 (13)

Victim's sexuality and gender of NVS perpetrator

The reporting of male sexual partners was significantly associated with experiencing NVS perpetrated by a male in both the GP (11/12; 92%; heterosexual men 29/58; 50%: $\chi 2$ 1 d.f. = 7.0, p = 0.008; OR 11; 95% CI 1.3-91) and the GUM samples (MSM 19/19; 100%; heterosexual men 3/21; 14%, $\chi 2$ 1 d.f. = 29.6, p < 0.000; OR 7.3; 95% CI 2.6-21).

Age at first (only) experience of NVS

All participants were asked to provide information on the age at which they first experienced NVS. In the GP sample NVS perpetrated by a male occurred at a marginally significantly younger age than NVS perpetrated by a female (t_{66} = 1.93, p < 0.06). The mean age of first NVS experience did not differ according to gender in the GUM sample (Table 45).

Table 45 *Age at first (only) experience of NVS*

	GUM ♂21	**GUM** ♀16	**GP** ♂39	**GP** ♀29
Mean age of first NVS experience	21.5 (SD = 5.5)	20 (SD = 3.9)	18.7 (SD = 3.1)	21.1 (SD = 6.7)

Number of NVS experiences

All participants were asked about the number of times they had experienced NVS in total. The number of reported NVS experiences did not differ significantly according to perpetrator gender in either the GP (Z = -.97, NS), or the GUM samples (Z = -1.16, NS: Table 46).

Table 46 *Number of NVS experiences*[8]

Number of NVS experiences	**GUM** ♂22 (n (%))	**GUM** ♀18 (n (%))	**GP** ♂40 (n (%))	**GP** ♀30 (n (%))
One	6 (27)	10 (56)	25 (63)	18 (60)
Between 2 and 5	11 (50)	6 (33)	13 (33)	3 (10)
More than five	5 (23)	2 (11)	2 (5)	9 (30)

[8] The response categories have been collapsed for presentation purposes

Participants' use of alcohol at the time of experiencing NVS

Both samples were asked about alcohol use when first experiencing NVS. The majority of men had either not been drinking or did not feel drunk the first (or only) time they experienced NVS (Table 47).

Table 47 *Alcohol use before first experiencing NVS*

Use of alcohol before first NVS experience	**GUM** ♂22 (n (%))	**GUM** ♀18 (n (%))	**GP** ♂39 (n (%))	**GP** ♀30 (n (%))
No alcohol	10 (46)	7 (39)	24 (62)	14 (47)
Alcohol, but did not feel drunk	7 (32)	4 (22)	7 (18)	6 (20)
Alcohol, felt quite/very drunk	5 (23)	7 (39)	8 (20)	10 (33)

Location of NVS experience

The victim's home was the most frequently reported location of NVS occurring with either a male or a female in both samples (Table 48).

Table 48 *Location of NVS experience*

Location	**GUM** ♂22 (n (%))	**GUM** ♀18 (n (%))	**GP** ♂37 (n (%))	**GP** ♀27$ (n (%))
Perpetrator's home	13 (59)	11 (61)	18 (49)	13 (48)
Victim's home	1 (5)	2 (11)	3 (8)	10 (36)
Outdoors/public place/vehicle	3 (14)	4 (22)	8 (22)	6 (22)
Other place[9]	5 (23)	1 (6)	9 (24)	5 (19)

$ One man in the GP sample reported experiencing NVS in a custodial institution

Identity of perpetrators

The variable 'intimate partner' was created by combining responses to questionnaire items about NVS experienced with wife/ex-wife, lover/sexual partner, ex-lover/sexual partner (question regarding ex-wife posed to GP sample only). The variable 'acquaintance' was created by combining responses to questionnaire items about NVS with a perpetrator known by sight/name only or a person just met (this latter query was given to GUM sample participants only).

[9] The location variable 'other place' was created by combining responses to questionnaire items about NVS occurring in pubs or clubs, work environments, and unidentified places.

Intimate partners were the most frequently reported female perpetrator in both samples. The most frequently reported male perpetrator was 'friend' in the GP sample and 'person just met' in the GUM sample (Table 49).

Table 49 *Identity of perpetrators of NVS*

Identity of perpetrator	GUM ♂22 (n (%))	GUM ♀18 (n (%))	GP ♂39 (n (%))	GP ♀29 (n (%))
Intimate partner	5 (23)	7 (39)	2 (14)	14 (41)
Friend	3 (14)	1 (6)	14 (36)	6 (21)
Work colleague	2 (9)	1 (6)	5 (13)	5 (17)
Relative	2 (9)	1 (6)	3 (8)	1 (3)
Acquaintance	17 (77)	5 (23)	10 (26)	5 (17)
Other person	2 (9)	3 (17)	8 (21)	5 (17)

Identity of perpetrators – relatives

Participants reporting NVS with a relative were also asked about the identity of the relative. Men in the GP sample reported NVS perpetrated by male relatives (father (n=1; uncle (n=1); other relative (n=1)), and female relatives (mother (n=1); step-mother (n=1: perpetrated with father)).

Men in the GUM sample also reported NVS perpetrated by a male relative (n= 1, not father/stepfather, brother/stepbrother, uncle or grandfather) and a female relative (sister (n=1)).

Genital responses in the victims

The majority of men experienced either erection or ejaculation irrespective of sample or perpetrator gender (Table 50).

Table 50 *Victim's genital responses during NVS*

Genital response	GUM ♂22 (n (%))	GUM ♀18 (n (%))	GP ♂39 (n (%))	GP ♀28 (n (%))
Erection or ejaculation	16 (73)	12 (66)	21 (54)	24 (86)[a]

Perpetrators' actions during NVS

The data from various interview items were combined into the following variables:

- Verbal coercion (blackmail or bribery)
- Verbal hostility (including (1) saying insulting things, (2) shouting/screaming, (3) threats to harm and/or kill)
- Use of substances (drugged victim or got victim drunk)
- Physical coercion (including (1) slapping, pushing or handling roughly, (2) beating, punching or kicking, (3) choking or strangling, (4) tying or gagging, (5) threatening and/or hurting with a weapon)
-

In the GUM sample verbal hostility was only reported where a male perpetrator was involved. Rates of physical coercion by male and female perpetrators in the GP sample were identical (Table 51).

Table 51 *Coercive behaviours of perpetrators*

Perpetrator's actions	**GUM** ♂22 (n (%))	**GUM** ♀18 (n (%))	**GP** ♂39 (n (%))	**GP** ♀28 (n (%))
Verbal coercion	7 (32)	3 (17)	11 (29)	6 (21)
Verbal hostility	6 (27)	0 (0)£	8 (21)	10 (36)
Use of substances	7 (32)	3 (17)£	8 (21)$	10 (36)
Physical coercion	6 (27)	1 (6)	8 (21)	6 (21)

Victim's belief that they may be killed

In the GP sample 14% victims of (3/22) male perpetrators thought that the may be killed while experiencing NVS (no victim of a female thought this). In the GUM sample 5 % (2/39) of victims of male and 10% (3/29) of victims of female perpetrators thought they may be killed while experiencing NVS.

Victim's behaviour

The variable 'verbal resistance/negotiation' was created by combining the following interview items:

- The victim trying to reason with the perpetrator
- The victim shouting or screaming at the perpetrator
- The victim begging to be let go
- The victim saying he would do some things, but not others

Overall (GUM and GP data combined) there was a significant association between 'freezing' and male perpetrator ($\chi 2$ 1 d.f = 4.1, p <0.05; OR 2.5; 95% CI 1.01-6.1: Table 52).

Table 52 *Victims' behaviour during NVS*

Victim's behaviour during NVS	**GUM** ♂22 (n (%))	**GUM** ♀17 (n (%))	**GP** ♂38 (n (%))	**GP** ♀28 (n (%))
Froze and could not help self	4 (18)	1 (6)	19 (50)	8 (29)
Did what was told to do	7 (32)	1 (6)	9 (24)	4 (14)
Verbal resistance/negotiation	4 (18)	1 (6)	16 (42)	11 (39)
Fought back	2 (9)	1 (6)	5 (13)	1 (4)

Sexual behaviours of perpetrators

The variable hand/genital contact was created from combining questionnaire items about fondling of genitals and/or masturbation (of the victim). Hand/genital contact was the most frequent sexual behaviour of male perpetrators. Nearly one third of men in the GUM and nearly one-fifth of men in the GP sample reported being raped. More than half of female perpetrator's fellated victims (see Table 53).

Table 53 *Sexual behaviours of perpetrators by perpetrator gender (sample)*

Perpetrator's actions	**GUM** ♂21 (n (%))	**GUM** ♀16 (n (%))	**GP** ♂37 (n (%))	**GP** ♀28 (n (%))
Hand/genital contact[s]	15 (71)	6 (38)	27 (73)	17 (61)
Fellated victim	6 (29)	10 (63)	13 (35)	17 (61)
Masturbated over victim	6 (29)	0	2 (5)	0
Put object in victim's anus	4 (19)	0	1 (3)	1 (4)
Raped victim	6 (29)	-	7 (19)	-

Note: One man victim of a female perpetrator in the GP sample reported having sex photos taken.

Sexual acts performed by victims

The variable hand/genital contact was created from combining questionnaire items about fondling of genitals and/or masturbation (by the victim). The variable orogenital contact was created by combining questionnaire items about fellatio/cunnilingus. Nearly half of men in both samples were forced to have intercourse by a female perpetrator (Table 54).

Table 54 *Sexual acts performed by victims*

Victim's actions	GUM ♂21 (n (%))	GUM ♀16 (n (%))	GP ♂37 (n (%))	GP ♀28 (n (%))
Hand/genital contact	11 (52)	3 (19)	15 (41)	5 (18)
Orogenital contact	9 (43)	6 (38)	10 (27)	13 (46)
Masturbated over perpetrator	1 (5)	0	4 (11)	2 (7)
Intercourse with a female*	1 (5)	7 (44)	2 (5)	14 (50)

Note: One man in the GUM sample reported that he was made to anally penetrate a male perpetrator with his penis' *This is possible where male perpetrators are indicated since cases where male *and* female perpetrators were involved were classed as cases of male perpetration.

Rape according to Sexual Offences Act (SOA) 1994 and SOA 2003

The definition of rape was changed in 2003 (after the data were collected) to include penile penetration of the mouth. Table 55 below presents data on reported rape according to the 1994 SOA (penile penetration of the anus) and 2003 SOA definitions. According to the new definition, more than half of the men in who experienced NVS with a male in the GUM sample (and nearly forty per cent of men who experienced NVS with a male in the GP sample) had experiences that would meet the SOA 2003 criteria for rape (Table 55).

Table 55 *Rape according to different definitions in English Law*

Rape	GUM ♂21 (n (%))	GUM ♂37 (n (%))
SOA 1994 definition	6 (29)	7 (19)
SOA 2003 definition	11 (52)	14 (38)

Effect of interviewer on reported NVS characteristics

A significantly higher proportion of men interviewed by the male interviewer reported NVS (3.7% vs. 2%: $\chi^2 = 6.3$, 1 d.f., $p < 0.05$). However, there were no significant differences between data obtained from male or female interviewers regarding:

- The number of NVS experiences reported (Z = -.20, NS)
- The age at which men reported their first experience of NVS (male interviewer: mean 19.5; SD 6; female interviewer: mean 20; SD 3: t67 = 0.7, NS).

- Proportion of NVS experiences involving male perpetrators (male interviewer 24/45: 53%; female interviewer 16/25: 64%: $\chi 2 < 1$, 1 d.f., NS)
- The proportion of men who reported rape according to the 2003 SOA (male interviewer 11/43; 26%: female interviewer 3/23; 13%: $\chi 2 = 1.4$, 1 d.f., NS).

Summary of characteristics of NVS

More than fifty per cent of all perpetrators were male and reporting of male sexual partners was significantly associated with male perpetrator. NVS was the first sexual experience with another person for between one sixth and two fifths of participants. The majority of men in the GUM and the minority of men in the GP sample reported more than one experience of NVS. The minority of victims reported being quite or very drunk when experiencing NVS which most often occurred in the perpetrator's home. Between one sixth and two fifths of perpetrators were current or ex intimate partners. The majority of men reported erection or ejaculation during NVS. As hypothesised, 'freezing' during NVS with a male was marginally significantly associated with male perpetrator. More than half of NVS experiences with a male in the GUM sample and nearly two-fifths of NVS experiences with a male perpetrator appeared to meet the 2003 SOA Act definition of rape. There was a significant association between male interviewer and reporting of NVS, although reporting of various characteristics of NVS did not differ significantly according to interviewer gender.

Part 4 Injuries/STDs obtained and medical help-seeking

This section presents information on medical consequences of NVS experiences and help-seeking from both medical and non-medical sources.

Injuries and infections obtained during NVS

A new variable (physical injury) was created from interview items inquiring about the presence of a number of injuries (1) cuts or soreness, (2) cuts and wounds, (3) bruises, (4) cuts and bruises, (5) broken bone(s), (6), internal injury). The majority of victims did not receive any physical injuries or contract an STD during NVS (Table 56).

Table 56 *Injuries and infections obtained during NVS*

Injuries and infections obtained	**GUM** ♂20 (n (%))	**GUM** ♀16 (n (%))	**GP** ♂37 (n (%))	**GP** ♀27 (n (%))
Sexually transmitted disease	2 (10)	2 (13)	0	0

Injuries and infections obtained	GUM ♂20 (n (%))	GUM ♀16 (n (%))	GP ♂37 (n (%))	GP ♀27 (n (%))
Physical injury[$]	5 (25)	2 (13)	6 (16)	3 (11)

$ no man reported a life-threatening injury

Medical help seeking

No man reported first aid from a non-medical person and few men reported seeking medical help or advice after experiencing NVS (Table 57).

Table 57 Medical help seeking after NVS

Help-seeking behaviour	GUM ♂6 (n (%))	GUM ♀4 (n (%))	GP ♂6 (n (%))	GP ♀3 (n (%))
Medical help and/or advice about HIV	2 (33)	2 (50)	5 (84)	1 (33)

Time between experiencing NVS and obtaining medical help

Due to missing data only 13 men (five in the GUM sample10), and eight in the GP sample[11]) were asked about time between NVS and obtaining help. In the GUM sample, no man went for help within 24 hours, while in the GP sample three men (38%) went for help within 24 hours (two victims of a male and one victim of a female perpetrator).

Informing the GP about the NVS experience and the helpfulness of the GP

In the GP sample one victim of a male and one victim of a female perpetrator reported telling their GP. One victim of a female perpetrator in the GUM sample also informed his GP. The GP was rated as 'Very helpful' in all cases.

Reasons for not informing medical staff about the NVS experience

The most common reason for not informing medical staff about the NVS experience was the belief that the experience(s) was not a medical thing (Table 58).

[10] Missing data for five men
[11] Missing data for one man

Table 58 *Reasons for not telling medical staff about the NVS experience by perpetrator gender*

Reason for not telling the GP	GUM ♂19 (n (%))	GUM ♀14 (n (%))	GP ♂32 (n (%))	GP ♀26 (n (%))
Did not think it was a medical thing	9 (47)	5 (38)	13 (41)	12 (46)
Too embarrassed	3 (16)	0	10 (31)	5 (19)
Did not think the doctor would believe them	0	0	0	1 (4)
Doctor might think it was their fault	1 (5)	0	2 (6)	0
Did not want their doctor to find out about it	3 (16)	0	1 (3)	0
Did not think their doctor could help	0	1 (7)	3 (9)	2 (8)
Doctor might think they are gay	1 (5)	0	2 (6)	0

Response to potential GP inquiry about experience of NVS

Substantial proportions of men would not tell their GP that they had experienced NVS if it was inquired about (Table 59).

Table 59 *Response to potential GP inquiry about experience of NVS*

Tell GP if asked?	GUM ♂19 (n (%))	GUM ♀13 (n (%))	GP ♂36 (n (%))	GP ♀27 (n (%))
Yes	11 (58)	3 (23)	9 (25)	10 (37)
No	7 (37)	6 (46)	15 (42)	6 (22)
Don't know	1 (5)	4 (31)	12 (33)	11 (41)

Help-seeking from on-medical sources of help after experiencing NVS

The majority of victims (more than 85% of men victimised by male or female perpetrators in the GUM and more than 90% of men victimised by a male or female in the GP sample) did not obtain help from non-medical sources. In the GUM sample three victims of male perpetrators obtained help from an unidentified source, while a victim of a female perpetrator contacted the Samaritans.

A victim of a male perpetrator in the GP sample also contacted the Samaritans, while three men (two victims of a male perpetrator) spoke with a religious leader. One victim of a female perpetrator obtained help from an unidentified source.

Summary of findings re injuries and help-received

Rates of injury and STD acquisition (0% in the GP sample) were low after experiencing NVS and few men reported seeking help from medical or non-medical agencies. Rates of reporting NVS to GPs were low, with many men feeling that their experience of NVS was 'not a medical thing' or being too embarrassed to report it to the GP. However, GPs were rated as 'very helpful' in the three cases where they were informed about an NVS experience.

Part 5 Disclosure of NVS to medical and non-medical services and the police

This section presents data on the disclosure of NVS to a variety of sources including the police. Data are also presented on reasons for not reporting to the police and the outcome of cases and satisfaction with the police where a compliant was made. The data from various response options were combined into the following variables:

- Disclosure to an intimate partner (including wife/ex-wife and lover or sexual partner with whom the participant was cohabiting at least at the point of disclosure)
- Disclosure to family members (parents and/or other family members)
- Disclosure to professionals (care worker/social worker, counsellor or therapist, psychologist or psychiatrist)

Disclosure to others soon after experiencing NVS

The majority of victims had not told anybody within two weeks of experiencing NVS, and no mental health professionals were told within two weeks of the experience (Table 60).

Table 60 *Disclosure to others two weeks after experiencing NVS*

Victim disclosed to	**GUM** ♂19 (n (%))	**GUM** ♀13 (n (%))	**GP** ♂37 (n (%))	**GP** ♀27 (n (%))
No-one	11 (58)	17 (54)	25 (68)	17 (63)
Intimate partner	3 (16)	0	2 (6)	2 (7)
Family member	1 (5)	0	4 (11)	0
Friend	6 (32)	7 (54)	5 (14)	5 (19)

Victim disclosed to	GUM ♂19 (n (%))	GUM ♀13 (n (%))	GP ♂37 (n (%))	GP ♀27 (n (%))
Professional	0	0	1 (3)	0
Other person	1 (5)	1 (8)	2 (5)	2 (7)

Subsequent disclosure to others of experiencing NVS

With the exception of men in the GP sample who experienced NVS with a male the majority of men had disclosed experiencing NVS to at least one other person at some point after experiencing NVS (Table 61).

Table 61 *Subsequent disclosure to others of experiencing NVS by perpetrator gender*

Victim disclosed to	GUM ♂19 (n (%))	GUM ♀13 (n (%))	GP ♂37 (n (%))	GP ♀27 (n (%))
No-one	6 (32)	6 (46)	23 (62)	12 (44)
Intimate partner	3 (16)	1 (8)	9 (24)	6 (22)
Family member	1 (5)	0	2 (7)	2 (5)
Friend	12 (63)	6 (46)	7 (19)	10 (37)
Professional	0	0	2 (5)	1 (4)
Other person	2 (11)	0	0	1(4)

Ever disclosed NVS

The lowest rate of disclosure of NVS was in men in the GP sample who had experienced NVS with a male (Table 62).

Table 62 *Lifetime disclosure of NVS*

Victim ever disclosed to someone	GUM ♂19 (n (%))	GUM ♀13 (n (%))	GP ♂37 (n (%))	GP ♀27 (n (%))
Yes	15 (79)	8 (62)	19 (51)	17 (63)

Reporting of NVS to the police and satisfaction with the police

GUM participants were asked to provide information on the perpetrator(s) of their only or most serious NVS experience. GP participants were asked to provide data on all experiences of NVS. Only two men reported their NVS experience to the police. The police were rated as either 'very helpful' or 'quite helpful' in these cases.

Arrest of the perpetrator and court matters

GUM participants were asked to provide information on the perpetrator(s) of their only or most serious NVS experience. GP participants were asked to provide data on all experiences of NVS. In both cases where the police were told the incident involved a male perpetrator who was subsequently apprehended by the police. In one of these cases the victim gave evidence in court and reported that the perpetrator was fined and given probation (no data on satisfaction with the court's decision). In the other case, the person gave no reason why he did not appear in court and no information on the outcome of any trial.

Reasons for not reporting NVS to the police

Men who did not report their NVS experience to the police were asked to give reasons for not having done so. GUM participants were asked to provide information on the perpetrator(s) of their only or most serious NVS experience. GP participants were asked to provide data on all experiences of NVS. Being too embarrassed to go to the police and not wanting to get the person into trouble were the reasons most frequently given for non-disclosure to the police in the GP sample. One man in the GUM sample only thought that the police would think he was gay if he disclosed his NVS experience (Table 63).

Table 63 *Reasons for not reporting NVS to the police by perpetrator gender (sample)*

Reason(s) for not reporting to the police	**GUM** ♂ 18 (n (%))	**GUM** ♀13 (n (%))	**GP** ♂34 (n (%))	**GP** ♀27 (n (%))
Victim believes the police don't care	2 (11)	1 (8)	2 (6)	1 (4)
Victim too embarrassed	1 (6)	2 (15)	12 (35)	4 (15)
Victim did not believe the police would believe him	1 (6)	0	2 (6)	2 (7)
Victim is gay and does not feel police are helpful to the gay community	2 (11)	0	4 (12)	0
Victim not want to get the person into trouble	1 (6)	0	6 (18)	6 (22)
Victim thinks police would think he is Gay if he reports NVS	1 (6)	0	0	0

Reason(s) for not reporting to the police	GUM ♂ 18 (n (%))	GUM ♀13 (n (%))	GP ♂34 (n (%))	GP ♀27 (n (%))
Other reason	13 (72)	11 (85)	19 (56)	18 (67)

Summary

Most men had disclosed their experience of NVS. Only two men reported their NVS experience to the police and the police were not perceived to have responded negatively in either case. The police had arrested perpetrators in both cases and one perpetrator had been sentenced. The most frequent reason in the GP sample for non-disclosure to the police of NVS perpetrated by males was being too embarrassed.

Part 6 Mental health problems and sexuality concerns

Participants in both samples were asked to provide data about mental health problems[12] before and after their first (only) experience of NVS. In an attempt to understand mental health problems more likely to be associated with NVS in particular, the data presented in table 64 below *excludes* data from men who reported both CSA and NVS (irrespective of ASE) as these men were more likely to have had mental health problems before experiencing NVS.

The reporting of psychological disturbance or any kind of problem *decreased* after experiencing NVS, while the reporting of sexual and drug problems increased (although numbers were small). There were no significant differences in rates of reporting mental health problems before and after experiencing NVS (Table 64).

Table 64 *Mental health problems before and after NVS*

Symptom	Before NVS (n (%))	After NVS (n (%))
Psychological disturbance [a]	21 (30)	18 (26)
Sexual problem [b]	4 (6)	8 (11)
Drug problem [c]	2 (3)	3 (4)
Any problem [d]	26 (37)	24 (34)

[12] Note that participants were asked if they had ever experienced alcohol or DSH problems and, as such, the presence of these could not be inquired about before/after experiencing NVS

a-d: all χ^2 1 *d.f.*, < 1, NS[13]

Help received for anxiety, mood, sleep, sexual or drug problems before and after experiencing NVS

Participants in both samples were asked to provide data about help-seeking for mental health problems before and after their first (only) experience of NVS. More men reported receiving help for a mental health problem occurring after NVS (after 11/17; 65%) compared with help received for a mental health problem occurring before NVS (11/25; 44%[14]).

Prevalence of mental health problems

The prevalence of mental health problems (in both samples) was assessed after dividing the combined sample into the categories of experience described in the method section. For those experiencing NVS any mental health problems before and/or after NVS were conflated into one variable (mental health problem(s) after sixteen) to be consistent with those persons without NVS experiences who were also reporting on mental health problems since age 16 (mental health problems before age 16 are considered later). The reader is reminded that data for substance misuse and deliberate self-harm are for difficulties experienced at any time and may include difficulties before age sixteen. There was a significant linear trend for the reporting of all of the mental health categories inquired about (Table 65).

Table 65 *Prevalence of mental health problems according to experience category*

Mental health problem	**No experiences$_{2151}$** (n (%))	**ASE only$_{191}$** (n (%))	**NVS$_{70£}$** (n (%))	**CSA(1)$_{109$}$** (n (%))	**CSA(2)$_{41$}$** (n (%))
Psychological Disturbance[a]	663 (31)	67 (35)	24 (35)	48 (44)	27 (66)
Sexual problem[b]	97 (5)	14 (7)	8 (11)	15 (14)	9 (22)
Substance misuse[c]	237 (11)	33 (17)	17 (24)	19 (17)	15 (36)
Self-harm[d]	128 (6) (n=2141)	23 (13) (n=183)	12 (17) (n=69)	22 (21) (n=107)	12 (31) (n=39)
Any of the above[e]	837 (39)	84 (44)	41 (59)	68 (62)	31 (76)

[13] McNemar test

[14] Data were missing for 5 cases on this variable. An analysis of help received pre and post NVS where data were available for both questions found no significant difference between the proportion of men receiving help before and after NVS (χ^2 *1d.f.*, < 1, NS: McNemar test)

a: MH $\chi 2$ 1 d.f., = 26.1, $p < 0.000$; b: MH $\chi 2$ 1 d.f., = 43.6, $p < 0.000$; c: MH $\chi 2$ 1 d.f., = 32.5, $p < 0.000$; d: MH $\chi 2$ 1 d.f., = 76.4, $p < 0.000$; e: MH $\chi 2$ 1 d.f., = 52.7, $p < 0.001$ £ With a male and/or female perpetrator (irrespective of ASE); $ including CSA and NVS experiences (both irrespective of ASE)

Help received for mental health problems

There was a significant linear trend for help received from a mental health professional only[15] (MH χ^2 1 d.f., = 12.8, $p < 0.001$:Table 66)

Table 66 *Help received for mental health problems*

Type of help	No Exp_{709} (n (%))	ASE_{73} (n (%))	$NVS_{29£}$ (n (%))	$CSA_{83\$}$ (n (%))
Doctor	324 (46)	28 (38)	10 (35)	38 (46)
Mental health worker[16]	138 (20)	17 (23)	11 (38)	28 (34)
Medical Intervention	160 (23)	17 (23)	6 (21)	17 (21)
Other	59 (8)	10 (14)	7 (24)	6 (7)
Received any help	305 (43)	32 (44)	12 (41)	37 (45)

£ With a male and/or female perpetrator (irrespective of ASE); $ including CSA *and* NVS experiences (both irrespective of ASE)

Effect of interviewer on reporting of mental health problems

Male interviewer was significantly associated (GP sample only) with reporting of all categories of mental health problems:

- Psychological disturbance (MI 424/1136: 37%; FI 325/1258: 26%: $\chi^2 = 36.6$, 1 d.f., $p < 0.000$; OR 1.7; 95% CI 1.4-2.0)
- Sexual problem (MI 85/1136: 8%; FI 29/1258: 2%; $\chi^2 = 35.3$, 1 d.f., $p < 0.000$; OR 3.4; 95% CI 2.0-5.3)
- Substance misuse (MI 198/1134: 18%; FI 77/1252: 6%; $\chi^2 = 75.0$, 1 d.f., $p < 0.000$; OR 3.2; 95% CI 2.5-4.3)
- Deliberate self-harm (MI 120/1112: 11%; FI 48/1252: 4%; $\chi^2 = 43.2$, 1 d.f., $p < 0.000$; OR 3.0; 95% CI 2.1-4.3).

[15] The reader is reminded that, due to small cell sizes CSA was not divided into two levels of severity
[16] Counsellor/therapist/psychiatrist/psychologist

- Any problem (MI 564/1136: 50%; FI 389/1258: 31%; χ^2 = 87,4, 1 d.f., p < 0.000; OR 2.2; 95% CI 1.9-2.6)

Male interviewer was marginally significantly associated with reporting of help received from a mental health professional only:

- Doctor (MI 211/459: 46%; FI 164/343: 48%; χ^2 < 1, NS)
- Mental health professional (MI 110/459: 24%; FI 64/343: 8%; χ^2 = 3.2, 1 d.f., P < 0.08; OR 1.4; 95% CI 0.9-1.9)
- Medical intervention (MI 108/459: 14%; FI 72/343: 9%; χ^2 < 1, NS)
- Other source of help (MI 42/459: 5%; FI 35/343: 4%; χ^2 < 1, NS)
- Any help (MI 269/459: 59%; FI 195/343: 57%; χ^2 <1, NS)

Predictors of mental health problems

CSA involving orogenital contact and/or intercourse was a significant predictor of all mental health problem categories after controlling for confounders. CSA not involving orogenital contact and /or intercourse was a significant predictor of sexual problems, deliberate self-harm and the category any mental health problem after controlling for confounders. NVS was a marginally significant predictor of deliberate self-harm after controlling for confounders. ASE was also a significant predictor of deliberate self-harm after controlling for confounders (Table 67).

Table 67 *Predictors of mental health problems and help received for these problems*

MHP	ASE Crude odds	ASE Adjusted odds	NVS Crude odds	NVS Adjusted odds	CSA2 Crude odds	CSA2 Adjusted odds	CSA1 Crude odds	CSA1 Adjusted odds
Psychological disturbance	1.2 NS (0.9-1.7)	1.0 NS (0.8-1.5)	1.2 NS (0.8-2.1)	0.8 NS (0.5-1.4)	1.8 p < 0.004 (1.2-2.6)	1.4 NS (0.9-2.2)	4.3 p < 0.000 (4.3-8.3)	3.1 p < 0.001 (1.6-7.3)
Sexual problem	1.7 p < 0.10 (0.9-3.0)	1.4 NS (0.7-3.6)	2.7 p < 0.01 (1.3-5.9)	1.6 NS (0.7-3.6)	3.4 p < 0.000 (1.9-6.0)	3.8 p< 0.002 (1.6-8.7)	5.9 p < 0.000 (2.8-12.8)	3.4 p < 0.000 (2.4-4.9)
Substance use	2.3 p <0.000 (1.4-3.6)	1.3 NS (0.8-1.9)	3.3 p< 0.000 (1.7-6.3)	1.6 NS (0.8-2.9)	4.0 p < 0.000 (2.5-6.7)	1.2 NS (0.6-2.2)	6.9 p < 0.000 (3.5-14)	3.3 p < 0.001 (1.6-6.9)
Self-harm	1.7 p< 0.01 (1.1-2.5)	1.8 p < 0.05 (1.1-2.3)	2.6 p < 0.001 (1.5-4.5)	2.0 p = 0.05 (0.99-4.0)	1.7 p < 0.05 (1.0-2.8)	3.6 p < 0.000 (2.1-6.1)	4.6 p < 0.000 (2.4-8.9)	4.2 p < 0.000 (1.9-8.9)
Any problem	1.1 NS (0.8-1.5)	0.9 NS (0.7-1.4)	2.2 p < 0.001 (1.4-3.6)	1.5 NS (0.9-2.6)	2.6 p < 0.000 (2.4-9.9)	2.1 p < 0.001 (1.3-3.3)	2.4 p < 0.000 (2.4-9.9)	4.7 p < 0.002 (3.7-6.1)

Confounders

A number of confounders were significant predictors of mental health problems.

Reporting of male sexual partners

The reporting of male sexual partners was a significant predictor of 'psychological disturbance' (OR 1.9; 95% CI 1.3-2.9; $p < 0.005$); the category 'any problem' (OR 1.6; 95% CI 1.1.-2.5); and a marginally significant predictor of a sexual problem (OR 1.8; 95% CI 0.9-3.3; $p < 0.07$).

Sample

GUM patient status was a significant predictor of psychological disturbance (OR 2.8; 95% CI 1.6-4.7; $p < 0.001$); a sexual problem (OR 2.8; 95% CI 1.6-4.7; $p < 0.001$); the category 'any problem' (OR 2.1; 95% CI 1.5-3.1; $p < 0.001$); and a marginally significant predictor of substance misuse (OR 1.5; 95% CI 0.9-2.2).

Psychological problems in childhood

Psychological problems in childhood were significant predictors of all categories of mental health problems: 'psychological disturbance' (OR 4.4; 95% CI 3.6-5.5); $p < 0.001$); sexual problem (OR 3.4; 95% CI 2.4-4.9; $p < 0.001$); substance misuse (OR 3.2; 95% CI 2.3-4.4; $p < 0.001$); deliberate self-harm (OR 3.2; 95% CI 2.3-4.4; $p < 0.001$); and the category 'any problem' (OR 4.7; 95% CI 3.6-6.1; $p < 0.001$).

Age

Younger men were significantly more likely to report deliberate self-harm (OR 0.97; 95% CI 0.96-0.98; $p < 0.001$); and substance misuse (OR 0.97; 95% CI 0.96-0.98; $p < 0.001$).

Occupational class

Non-manual occupational class was a significant *negative* predictor of substance misuse (OR 0.97; 95% CI 0.96-0.98).

Ethnic group

White ethnic background was a significant predictor of a sexual problem (OR 4.5; 95% CI 1.7-11.8; $p < 0.002$), and substance misuse (OR 2.9; 95% CI 1.6-5.0; $p < 000$).

Predictors of help-seeking

CSA was a significant predictor of help received from a mental health professional. NVS was a marginally significant predictor of help from a mental health professional, but a significant predictor of help received from another source. NVS was a significantly associated with not receiving help from a doctor. ASE was not a significant predictor of help from any source in table 68. None of the reported experiences were predictors of receiving the category 'any kind of help' (Table 68).

Table 68 *Predictors of help-seeking from various sources*

	ASE	ASE	NVS	NVS	CSA	CSA
Source of help	**Crude odds**	**Adjusted odds**	**Crude odds**	**Adjusted odds**	**Crude odds**	**Adjusted odds**
Doctor	0.8 (0.5-1.2)	0.9 (0.6-1.7)	0.4* (0.2-0.9)	0.9 (0.4-1.9)	1.0 (0.7-1.6)	1.2 (0.8-1.9)
Mental health worker	1.3 (0.8-2.1)	1.3 (0.7-2.4)	1.8 p < 0.10 (0.9-3.6)	2.3 p < 0.05 (1.0-5.3)	1.9 p < 0.01 (1.2 3.2)	2.2 p < 0.10 (0.9-4.9)
Other source	1.4 (0.7-2.6)	1.6 (0.8-3.2)	2.5 p < 0.05 (1.1-5.5)	2.9 p < 0.05 (1.2-7.3)	0.7 (1.3-1.8)	0.8 (0.3-1.9)
Medical intervention	1.1 (0.6-1.8)	1.3 (0.7-2.3)	0.7 (0.3-1.6)	1.1 (0.4-2.8)	0.9 (0.5-1.5)	0.9 (0.6-1.7)
Received any help	1.1 (0.7-1.6)	0.9 (0.5-1.4)	1.3 (0.7-2.5)	0.8 (0.4-1.6)	1.1 (0.71.7)	0.9 (0.6-1.5)

Confounders

A number of confounders were significant predictors of help-seeking.

Occupational class

Non-manual worker was a significant predictor of receiving help from a mental health worker (OR 1.8; 95% CI 1.2-2.6; p < 0.000).

Psychological problems in childhood

A psychological problem in childhood was a significant predictor of receiving help from a mental health worker (OR 2.2; 95% CI 1.6-3.1, p < 0.000).

Age

Younger men were significantly more likely to receive help from some 'other' source (OR 0.98; 95% CI 0.97-0.99; p < 0.05). Older men were significantly more likely to

report medical intervention (OR 1.01; 95% CI 1.001-1.03; $p < 0.000$) and help from a doctor (OR 1.03; 95% CI 1.02-1.04).

NVS and changes in sexuality

The reader is reminded that participant's sexuality was measured on a seven point scale (1 = exclusively gay ... 7 = exclusively heterosexual) based on the Kinsey scale. Men were asked about their orientation at the start of the interview and those reporting NVS were also asked about their orientation before their first/only experience of NVS. In 15% (n=14: 12 cases involving male perpetrators and 2 involving female perpetrators) of cases where men had experienced NVS, answers to sexual orientation queries were not identical (indicating a change in sexual orientation before and after experiencing NVS).

In eleven of twelve cases where a male perpetrator was involved there was a change in reported sexual orientation toward the heterosexual pole of the scale. A change in the gender of persons with whom the participant reported having sex was found in four cases and all of these involved moving from same-sex sexual partners to having female sexual partners (involving a change from sexual contact with males only to sexual contact with females only in one case (Table 69)).

Cases involving female perpetrators were few (n=2), but there was no change in the gender of persons with whom the participant reported having sexual contact subsequently (although in both cases participants reported engaging in sexual fantasies about sex with men after experiencing NVS with a female: Table 69).

Table 69 *Sexuality before first (only) NVS experience and sexuality at the time of the interview (GP sample shaded)*

Sexuality rating before NVS	Sexuality rating at time of interview	Perpetrator	Sample
2	3	Male	GUM
5	7	Male	GUM
6	7	Male	GUM
1	3	Male	GUM
2	6	Male	GUM
4	5	Male	GP
5	7	Male	GP
6	5	Male	GP
6	7	Male	GP

Sexuality rating before NVS	Sexuality rating at time of interview	Perpetrator	Sample
6	7	Male	GP
2	7	Male	GP
7	3	Male	GP
7	6	**Female**	GP
7	6	**Female**	GP

Analysis of data from the combined (GP and GUM) samples found a significant association between male perpetrator and change in rated sexual orientation (defined as a difference of one or more points on the sexuality scale: male perpetrator 12/53 (23%); female perpetrator 2/39 (5%), $\chi^2 = 5.34$, 1 d.f., $p < 0.05$).

Confusion about sexuality after experiencing NVS

Participants were also asked if they had experienced confusion about their sexuality after experiencing NVS. The 'yes' and 'don't' know responses to inquiry regarding confusion regarding about sexual orientation were combined into a single variable[1]. Analysis of data from the combined samples (GP and GUM) found a marginally significant association between male perpetrator and confusion about sexuality (Male 13/50 (26%), female 4/35 (11%); χ^2 1 d.f. = 2.7, $p < 0.10$).

Summary of findings regarding mental health problems and sexuality issues

Queries regarding a variety of mental health problems did not reveal large differences in prevalence rates before and after experiencing NVS (with rates decreasing for psychological disturbance and 'any mental health problem'. Univariable analyses of the hierarchy of reported sexual experiences were significant for all mental health categories. Multivariable analysis found that CSA (including or not including orogenital contact and/ or intercourse) was a significant predictor of more categories of mental health problems than either NVS or ASE that were only significant predictors of deliberate self-harm. The combined CSA variable was a significant predictor of help received from a mental health professional.

About a quarter of men who experienced NVS with a male perpetrator reported changes in their sexuality and/or confusion about sexuality after experiencing NVS. Further, there is evidence that NVS experienced with a male is (significantly)

[1] Assuming that it is reasonable to conclude that not being sure implies some doubt/confusion.

associated with changes in sexuality, and (marginally significantly) associated confusion about sexuality.

Part 7 Child sexual abuse: Prevalence, characteristics and disclosure

Prevalence of CSA

The prevalence of CSA in the GUM sample was more than twice of that in the GUM sample (Table 70).

Table 70 *Prevalence of CSA in the GP and GUM samples*

	GUM_{205} (n (%))	GP_{2423} (n (%))
CSA prevalence	25 (12) (95% CI 8-17)	128 (5.3) (95% CI 4-6)

Age, sexuality, occupational class, ethnic group and CSA

Analysis by age group (in the GP sample only) found no significant evidence for a rising/falling trend of CSA over the age groups (MH χ^2, 1 d.f ,< 1, NS: Table 711).

Table 71 *Prevalence of CSA in various age groups*

	18-24$_{258}$ (n (%))	*25-34*$_{536}$ (n (%))	*35-44*$_{452}$ (n (%))	*45-55*$_{421}$ (n (%))	*55-64*$_{377}$ (n (%))	*65-74*$_{293}$ (n (%))	*75-94*$_{128}$ (n (%))
CSA rate	10 (4)	24 (5)	36 (8)	22 (5)	25 (7)	6 (2)	5 (4)

The prevalence of CSA was significantly greater in men who reported male sexual partners in the GUM sample (MSM 10/45; 22%; heterosexual men 15/160; 9%; χ^2 1 d.f. = 5.4; OR 2.8; 95% CI 1.1-6.7), but not in the GP sample (MSM 7%; heterosexual 5%; χ^2 1 d.f. <1, NS; OR 1.4; 95% CI 0.5-3.4).

The prevalence of CSA did not differ significantly according to occupational class in either the GP (manual 46/852; 5.2%; non-manual 73/1416; 5.4%; χ^2 1 d.f. <1, NS; OR 0.9; 95% CI 0.7-1.4) of the GUM samples (manual 11/72; 15%; non-manual 10/109; 8%; χ^2 1 d.f. <1; OR 0.5; 95% CI 0.2-1.3).

The prevalence of CSA was marginally significantly less common in white men in the GUM sample (white 10%; non-white 19%; χ^2 1 d.f. = 3.5, $p < 0.07$; OR 0.5; 95% CI 0.2-1.1), but was not significantly different in the GP sample (white 122/2242; 5.4%; non-white 6/181; 3%; χ^2 1 d.f. = 1.5, NS; OR 1.7; 95% CI 0.7-3.7).

Summary of CSA prevalence and demographic factors

CSA was more common in the GUM sample. Unlike NVS there was no evidence that younger men were more likely to report CSA. Men who reported male sexual partners were more likely to report CSA than heterosexual men. CSA prevalence was not associated with occupational class, but was marginally significantly associated with white ethnic group in the GP sample.

Characteristics of CSA experiences

Gender of perpetrators of CSA

In both the GP and GUM samples the majority of CSA perpetrators were male (Table 72).

Table 72 *Gender of perpetrators of CSA*

Perpetrators:	**GUM_{25}** (n (%))	**GP_{124}** (n (%))
Gender		
♂ only	18 (72)	98 (79)
♀ only	5 (20)	24 (19)
♂ *and* ♀	2 (8)	2 (2)
Number and gender		
One boy or man	15 (60)	93 (75)
More than one boy or man	3 (12)	5 (4)
One girl or woman	5 (20)	18 (15)
More than one girl or woman	-	6 (5)
A boy or man and a girl or woman	-	1 (<1)
A group of people including boys or men and girls or women	2 (8)	1 (<1)

Victim sexuality and gender of CSA perpetrator

The reporting of male sexual partners was not significantly associated with experiencing CSA perpetrated by a male in either the GP (MSM 5/5; 100%;

heterosexual men 95/119; 80%: χ^2, $_{1\ d.f.}$ = 1.3, NS[2]) or the GUM sample (MSM 8/10; 80%; heterosexual men 12/15; 80%: χ^2, $_{1\ d.f.}$ < 1, OR 1.0; 95% CI 0.1-7.4).

Age at first (only) experience of NVS

In both samples CSA occurred at a significantly younger age with male perpetrators (GUM sample: $t_{23} = 2.7$, $p < 0.05$; GP sample: $t_{117} = 2.1$, $p < 0.05$: Table 73.

Table 73 Age at first (only) experience of CSA

	GUM ♂$_{20}$	GUM ♀$_{5}$	GP ♂$_{98}$	GP ♀$_{21}$
Mean age of first CSA experience	9.2 (2.2)	12.6 (3.8)	10.7 (2.9)	12.2 (2.3)

Number of CSA experiences

In the GP sample male perpetrators were involved in significantly more acts of CSA than were female perpetrators ($Z = -2.1$, $p < 0.05$). The number of CSA acts perpetrated by males or females did not differ significantly in the GUM sample ($Z = -.32$, NS: Table 74.

Table 74 *Number of CSA experiences*[3]

Number of CSA experiences	GUM ♂$_{20}$ (n (%))	GUM ♀$_{5}$ (n (%))	GP ♂$_{97}$ (n (%))	GP ♀$_{20}$ (n (%))
One	9 (45)	1 (20)	51 (53)	16 (80)
Between two and five	5 (25)	3 (60)	27 (28)	2 (10)
Between six and ten	2 (10)	-	10 (10)	1 (5)
More than ten	4 (20)	1 (20)	13 (13)	1 (5)

[2] Odds ratio/confidence intervals cannot be computed due to a zero cell

[3] The response categories have been collapsed for presentation purposes

Same/different perpetrators in those with more than one CSA experience

More than half of men who reported more than one experience of CSA in the GUM sample had these experiences with different male perpetrators. The majority of men who reported more than one experience of CSA in the GP sample had these experiences with the same (male or female) perpetrator (Table 75).

Table 75 *Per cent of victims with more than one CSA experience who reported repeated CSA with the same perpetrator*

	GUM ♂11 (n (%))	GUM ♀4 (n (%))	GP ♂46 (n (%))	GP ♀4 (n (%))
Same perpetrator	5 (46)	1 (25)	32 (70)	3 (75)

Period of time over which CSA occurred (in those with more than one CSS experience)

The duration of CSA in those reporting more than one CSA experience did not differ according to perpetrator gender in either sample (GP Z = -.6, NS; GUM Z= -1.2, NS: Table 76).

Table 76 *Period of time over which CSA occurred in those with more than one CSA experience*[4]

Duration of CSA	GUM ♂11 (n (%))	GUM ♀4 (n (%))	GP ♂46 (n (%))	GP ♀11 (n (%))
Less than 3 months	3 (27)	1 (25)	16 (35)	3 (75)
Between three and twelve months	4 (36)	3 (75)	10 (23)	-
More than twelve months	4 (36)	-	20 (43)	1 (25)

Identity of CSA perpetrators

The perpetrator category 'other person' was created by combining responses to the questionnaire items 'other person', someone father/mother was going out with, babysitter, care worker, sports coach, person going out with, religious leader, scout/cadet leader. Thirty five per cent of male perpetrators in the GUM sample were relatives. Only seventeen per cent of male perpetrators were relatives in the GP sample (Table 77).

[4] The response categories have been collapsed for presentation purposes

Table 77 *Identity of CSA perpetrators*

Perpetrator identity	GUM ♂20 (n (%))	GUM ♀5 (n (%))	GP ♂99 (n (%))	GP ♀24 (n (%))
Relative	7 (35)	2 (40)	17 (17)	3 (13)
Neighbour	4 (20)	2 (40)	1 (1)	2 (8)
Stranger	0	0	24 (25)	2 (8)
Teacher or someone else working at school	1 (5)	0	9 (9)	1 (4)
School pupil	4 (20)	0	14 (14)	4 (17)
Friend of the family	7 (35)	1 (20)	13 (13)	3 (13)
Other person(s)$	1 (5)	1 (20)	50 (50)	13 (54)

Identity of perpetrators - relatives

Male relatives who perpetrated CSA in the GP sample were father (n= 7), brother (n=5), uncle (n=3), grandfather (n=1) and other relative (n=3). Sisters were involved in two cases of CSA perpetrated by females in the GP sample (missing data from one participant).

Male relatives who perpetrated CSA in the GUM sample were father/step-father (both n= 1), brother (n=3), uncle (n=3) and other relative (n=3). Female perpetrators in the GUM sample were 'sister' and 'other' relative (both n = 1).

Genital responses in victims

Genital responses were more common in men who experienced CSA with a female perpetrator (Table 78).

Table 78 *Genital responses in victims of CSA*

Genital response	GUM ♂20 (n (%))	GUM ♀5 (n (%))	GP ♂99 (n (%))	GP ♀24 (n (%))
Ejaculation and/or erection	6 (30)	4 (80)	37 (37)	11 (46)

Coercive behaviours of perpetrators

The data from various interview items regarding reported perpetrator behaviour were combined into the following categories:

- Verbal coercion (persuaded to do it, told it was a good/right thing to do, said do with someone else if victim would not do it, said tell others if did not do it, said

they would hurt a pet or other animal if victim did not do it, said they would break or smash things if the victim did not do it, blackmailed victim, tricked victim)

- Verbal hostility (said insulting things, shouted/screamed at victim, said they would hurt and/or kill victim)
- Use of physical coercion (slapped, pushed or handled victim roughly, beat, punched or kicked victim, tied/gagged victim, threatened or hurt victim with a weapon)

The majority of perpetrators used verbal coercion, although physical coercion was used by nearly a third of male perpetrators in the GUM sample (Table 79)

Table 79 *Coercive behaviours of perpetrators*

Perpetrator's acts	**GUM** ♂20 (n (%))	**GUM** ♀5 (n (%))	**GP** ♂99 (n (%))	**GP** ♀24 (n (%))
Verbal coercion	18 (90)	4 (80)	63 (64)	18 (75)
Verbal hostility	9 (45)	1 (20)	11 (11)	6 (25)
Physical coercion	6 (30)	1 (20)	14 (14)	2 (8)

Sexual behaviours of perpetrators

The variable 'hand/genital contact' was created by combing responses to questionnaire items regarding genital touching and / masturbation. The variable 'other sexual acts was created by combining responses to questionnaire items regarding masturbating over the victim, urinating on the victim and taking sex photos of the victim. Most perpetrators had hand/genital contact with the victim, although a quarter of men in the GUM sample reported being raped (Table 80).

Table 80 *Sexual behaviours of male and female perpetrators of CSA*

Perpetrator's acts	**GUM** ♂20 (n (%))	**GUM** ♀5 (n (%))	**GP** ♂99 (n (%))	**GP** ♀23 (n (%))
Hand/genital contact	10 (50)	3 (60)	70 (71)	15 (63)
Other sexual acts	7 (35)	0	9 (9)	1 (4)
Fellated victim	5 (25)	1 (20)	10 (10)	5 (22)
Raped victim	5 (25)	-	7 (7)	-

Sexual acts victims made to perform

The variable 'hand/genital contact' was created by combing responses to questionnaire items regarding genital touching and / masturbation. The variable orogenital contact was created by combining responses to items regarding fellatio and cunnilingus. The variable 'other sexual acts' was created by combining responses to questionnaire items regarding masturbating over, and urinating, on the perpetrator. Nearly one third of men in the GUM sample reported being forced to perform fellatio (and/or cunnilingus – CSA involving male and female perpetrators was conflated into the male category: (Table 81).

Table 81 *Sexual acts victims made to perform*

Victim's acts	**GUM** ♂19 (n (%))	**GUM** ♀5 (n (%))	**GP** ♂99 (n (%))	**GP** ♀24 (n (%))
Hand/genital contact	10 (53)	0	38 (38)	6 (25)
Orogenital contact	6 (32)	2 (40)	9 (9)	2 (8)
Other sexual acts	1 (5)	0	6 (6)	1 (4)
Penile penetration of perpetrator	0	1 (20)	1 (1)	4 (17)

Disclosure of CSA within one month of first CSA experience

The majority of victims in both samples had not told anybody about their CSA experience within one month of it first happening (Table 82).

Table 82 *Disclosure of CSA within one month of first CSA experience*

Victim disclosed CSA to	**GUM** ♂19 (n (%))	**GUM** ♀5 (n (%))	**GP** ♂99 (n (%))	**GP** ♀22 (n (%))
Parent/other family member	4 (21)	0	6 (6)	2 (9)
Professional person$	0	0	6 (6)	1 (4)
Other person	1 (5)	0	5 (5)	1 (4)
Told no-one	14 (74)	5 (100)	83 (84)	18 (78)

$: Teacher/other person working at school, mental health professional, care worker (see item)

Subsequent disclosure of CSA

The majority of victims of CSA (perpetrated by a male or a female) in the GP sample had not told anybody about this experience. The majority of men in the GUM sample had disclosed about experiencing CSA with a male (Table 83).

Table 83 *Lifetime disclosure of CSA perpetrated by a male(s) or a female(s)*

Victim's disclosure after one month to	GUM ♂19 (n (%))	GUM ♀5 (n (%))	GP ♂99 (n (%))	GP ♀23 (n (%))
Parent/other family member	5 (26)	0	9 (9)	4 (17)
Intimate partner$	4 (21)	0	24 (24)	4 (17)
Professional person£	0	0	9 (9)	1 (4)
Other person	5 (26)	0	13 (13)	2 (9)
Told no-one	14 (74)	5 (100)	57 (57)	13 (57)

$ person going out with/lover/sexual partner/wife/ex-wife; £ counsellor/therapist/psychiatrist/psychologist/care worker/social worker;

Lifetime disclosure of CSA experiences

The majority of men had not disclosed experiencing CSA to another person (Table 84)).

Table 84 *Lifetime disclosure of CSA*

Victims has ever disclosed CSA	GUM ♂19 (n (%))	GUM ♀5 (n (%))	GP ♂99 (n (%))	GP ♀23 (n (%))
Yes	5 (26)	0	49 (49)	10 (43)

Disclosure of CSA to the police and giving evidence in court

In the GP sample CSA was reported to the police in only four cases. In two cases the victim reported, and in the other two cases somebody else reported the CSA to the police. In none of the cases did the victim go to court.

Effect of interviewer on reported CSA experiences

A significantly higher proportion of men reported CSA to the male interviewer (8% vs. 3%; χ^2 = 31.9, 1 *d.f.*, p < 0.000). There were no significant differences regarding interviewer gender for the following variables, however:

- The number of reported CSA experiences did not differ according to male or female interviewer (Z = -1.6, NS).
- The length of time over which CSA occurred did not differ according to reporting to the male or female interviewer (Z = -0.210, NS).

- The age at which men reported their first experience of CSA did not differ significantly between male (mean 11.1; SD 2.9) and female (mean 10.6; SD 2.6: $t_{118} = -.88$, NS) interviewers.
- The proportion of CSA incidents involving a male perpetrator did not differ significantly between the male (74/89; 83%) and female interviewers (26/35; 74%: $\chi^2_{1\,df} = 1.3$, NS).
- The proportion of men reporting orogenital contact (fellatio/cunnilingus) did not differ significantly between male (7/88; 8%) and female interviewer (4/35; 11%: χ^2 1 *d.f.*, <1, NS)
- The proportion of participants reporting rape did not differ significantly between the male (4/88; 5%) and female interviewer (3/35; 9%: $\chi^2_{1\,df}$, <1, NS).

Summary of reporting CSA characteristics and disclosure of CSA

The majority of CSA perpetrators were male. The association between perpetrator gender and victim sexuality was not significant. Age of first CSA experience was younger with male perpetrators. The majority of men in the GP sample reported one experience of CSA, with the opposite in men in the GUM sample. Verbal coercion was common with physical coercion used by nearly a third of male perpetrators in the GUM sample. One in four sexually abused men in the GUM sample reported being raped as a child (one in fourteen sexually abused men in the GP sample reporting being raped). The majority of men had not disclosed experiencing CSA and very few had reported the experience to the police. The association between male interviewer and reporting CSA was significant, but interviewer gender was not significantly associated with a number of characteristics of CSA.

Part 7.1 Assenting sexual experiences: Prevalence and characteristics

Prevalence of 'Assenting' experiences

Nearly eight per cent of men in the GP sample reported experiencing sex before age sixteen that they wanted to have with a person who was at least five years older. More than a quarter of men in the GUM sample reported the same experiences (Table 84).

Table 84 *'Assenting sexual' experiences in both samples*

	GUM_{203} (n (%))	GP_{2406} (n (%))
Prevalence of ASE	55 (27) (95% CI 21-33)	185 (7.7) (95% CI: 7-9)

Age, sexuality, occupational class, ethnic group and the prevalence of ASE

Change in reporting of 'consenting' sexual experiences over time was investigated in the GP sample only. Younger men were significantly more likely to report ASEs (MH χ^2 *1d.f.* = 20.7, $p < 0.0001$: Table 85).

Table 85 *Reporting of ASE according to age group*

	18-24$_{252}$ n (%)	**25-34$_{527}$ n (%)**	**35-44$_{437}$ n (%)**	**45-54$_{407}$ n (%)**	**55-64$_{365}$ n (%)**	**65-74$_{288}$ n (%)**	**75-94$_{123}$ n (%)**
Report of 'Assenting' experiences	27 (11)	50 (10)	40 (9)	32 (8)	22 (6)	10 (4)	2 (2)

In the GP sample reporting of ASEs was significantly greater in men who reported sexual partners (MSM 17%; heterosexual men 7%; OR 2.5; 95% CI 1.3-4.7). This association was not found in the GUM sample, however (MSM 31%; heterosexual men 26%; OR 1.3; 95% CI 0.6-2.7).

Manual occupational class was significantly associated with reporting ASEs in both samples (GP: manual 6%; non-manual 10%; OR 1.6; 95% CI 1.2-2.2: GUM: manual 41%; non-manual 19%; OR 3.0; 95% CI 1.5-3.5).

Ethnic group was not associated with reporting ASEs in the GP sample (white 7%; non-white 8%; OR 1.1; 95% CI 0.6-1.9), but was significantly associated with reporting of ASEs in the GUM sample (white 23%; non-white 39%; OR 2.1; 95% CI 1.1-4.2).

Gender of person with whom participants reported experiencing ASE

The majority of persons with whom men in both samples reported assenting experiences were female (Table 86).

Table 86 *Gender of persons with whom participants reported experiencing ASE*

Gender of person with whom experienced ASE	**GUM** ♂17 (n (%))	**GUM** ♀38 (n (%))	**GP** ♂24 (n (%))	**GP** ♀161 (n (%))
	17 (31)	38 (69)	24 (13)	161 (87)

Sexuality and gender of perpetrator of ASE

The reporting of male sexual partners was significantly associated with experiencing ASE with a male in the GP (MSM 9/12; 75%; heterosexual men 15/173; 9% : fisher's exact test p <0.000, OR 32; 95% CI 7.7-130) and the GUM sample (MSM 14/14; 100%; heterosexual men 3/41; 7%; Fisher's exact test p < 0.000; OR 5.7; 95% CI 2.0-15.8).

Age at which experienced ASE

The mean age of first (only) ASE was significantly lower with a male perpetrator in the GP sample ($t_{161} = 3.6$, $p < 0.000$), but not in the GUM sample ($t_{47} = 1.3$, NS: Table 87).

Table 87 *Mean age at first (only) ASE*

	GUM ♂15 (n (%))	**GUM** ♀34 (n (%))	**GP** ♂24 (n (%))	**GP** ♀161 (n (%))
Mean age (SD) of first (only) ASE	13.3 (2.5)	13.9 (1.4)	12.4 (2.0)	13.9 (1.8)

Identity of older person with whom participants engaged in 'consenting' sex before age of sixteen

Many perpetrators of ASE could not be identified (Table 88).

Table 88 *Identity of older person with whom participants engaged in 'consenting' sex*

Identity of older person	GUM ♂17 (n (%))	GUM ♀38 (n (%))	GP ♂24 (n (%))	GP ♀161 (n (%))
Boyfriend/girlfriend	1 (6)	14 (37)	2 (8)	52 (32)
Relative(s)	7 (41)	4 (11)	2 (8)	9(6)
School pupil	3 (18)	6 (16)	10 (42)	16 (10)
'Friend of the family'	1 (6)	5 (13)	2 (8)	16 (10)
Other person	11(65)	15 (40)	14 (58)	77 (48)

Relatives involved in 'consenting' experiences

No participant in either sample reported an ASE with a parental figure.

In the GUM sample men reported having sex with brothers (n=3), uncles (n=2) and 'other relative' (n=2). The category 'other relative' was also given for all cases (n=4) where a female was involved in 'wanted' sexual activity.

In the GUM sample male relatives involved in wanted sexual activity were cousin (n=1) and 'other relative' (n=1). Females with whom men had wanted sexual experiences were sister (n = 1), aunt, (n=1), cousin (n=5) and other relative (n = 3).

Sexual behaviours during 'assenting' experiences

The variable orogenital contact was created by combining responses to questionnaire items regarding fellatio-cunnilingus. Intercourse with a female was the most frequently reported ASE in the GP sample (Table 89).

Table 89 *Sexual behaviours during ASEs*

Sexual behaviours during ASE	GUM ♂17 (n (%))	GUM ♀38 (n (%))	GP ♂24 (n (%))	GP ♀161 (n (%))
Genital touch/masturbation	16 (94)	22 (58)	5 (13)	33 (21)
Orogenital[5] contact	8 (47)	17 (45)	3 (13)	17 (11)
Anally penetrated a male	3 (18)	-	1 (4)	-
Anally penetrated by a male	5 (29)	-	2 (8)	-
Intercourse with a female	2 (12)	28 (74)	1 (4)	44 (27)
Other sexual acts	1 (6)	2 (5)	0	4 (3)

Effect of interviewer on reporting of ASEs

A significantly higher proportion of men reported ASE to the male interviewer (10% vs. 6%: χ^2 *1d.f.* = 16.9, $p < 0.000$). There were no significant differences regarding interviewer gender for the following variables:

- The age at which men reported first experiencing ASE did not differ according to reporting to the male (mean 13.7; SD 1.7) or the female interviewer (mean 13.7; SD 2.2: $t_{179} = -0.13$, NS).
- The proportion of male perpetrators of ASE did not differ according to male (17/116; 15%) or female interviewer (7/69; 10%: χ^2 *1 d.f.*, < 1, NS).
- The proportion of men who had orogenital contact with a person five or more years older did not differ significantly between male (12/116; 10%) and female interviewer (8/69; 11%: χ^2 *1d.f.*, < 1, NS).

Thus, interviewer gender did not significantly affect reporting of various characteristics of ASEs. One exception, however, is that more men reported having sexual intercourse with a female to the female interviewer (male interviewer: 16/116; 14%; female interviewer 29/69; 42%: χ^2 *1d.f.*, 18.7, $p < 0.000$).

Summary of reporting of ASEs

ASE was more prevalent in the GUM sample. Younger men in the GP sample were significantly more likely to report ASE. Men in the GP sample who reported male sexual partners were more likely to report ASE. ASE was reported significantly more frequently by manual class participants. Non-white men in the Gum sample were significantly more likely to report ASE. The majority of ASE perpetrators were female. There was a significant association between reporting male sexual partners and male ASE perpetrator in the GP sample. Sexual intercourse was the most commonly reported sexual activity with a female perpetrator of ASE. ASE was reported significantly more often to the male interviewer. Sexual intercourse with a female was reported significantly more frequently to the female interviewer.

Part 8 Reported sexual experiences before age sixteen and mental health problems before age 16

Unlike the data for mental health problems over age sixteen the data for mental health problems under age sixteen are analysed using univariable statistics only. For this reason, the data for the two samples are presented separately (as no multivariate analysis controlling for sample site is subsequently applied to the data). It is intended that this approach will allow the reader to more easily assess the effect of the sample on the association between childhood experiences and mental health problems before age sixteen. There was a significant linear trend for reporting of psychological disturbance in the GP sample (MH $\chi 2$ 1 d.f., = 30.2, $p < 0.000$: Table 90), but not in the GUM sample (Table 91).

Table 90 *Reported mental health problems before age sixteen in the GP sample*

Mental health problem	**GP No CSA/ ASE (n=2061)** (n (%))	**GP ASE only (n=162)** (n (%))	**GP CSA(1) (n=85)$** (n (%))	**GP CSA(2) (n=29)** (n (%))
Psychological disturbance	297 (14)	31 (19)	27 (32)	11 (38)

$ Plus those reporting both CSA and CSE

Table 91 *Reported mental health problems before age sixteen in the GUM sample*

Mental health problem	**GUM No CSA/ ASE (n=131)** (n (%))	**GUM ASE only (n=46)** (n (%))	**GUM CSA(1) (n=12)$** (n (%))	**GUM CSA(2) (n=12)** (n (%))
Psychological disturbance	44 (34)	11 (24)	5 (42)	5 (42)

$ Plus those reporting both CSA and CSE

Help received for mental health problems before 16

Unlike the data for help seeking for mental health problems over age sixteen, the data for help-seeking for mental health problems under age sixteen are analysed using univariable statistics only. For this reason, the data for the two samples are presented separately (as no multivariate analysis controlling for sample site is subsequently applied to the data). It is intended that this approach will allow the reader to more easily assess the effect of the sample on the association between childhood experiences and help-seeking for mental health problems in childhood. There was a significant linear association (in the GP sample only) for help received from a mental health professional for problems experienced before age 16 (MH χ^2, 1 *d.f.* = 13.7, $p < 0.001$: Table 92)

Table 92 *Help received for mental health problems*

Source of help	**GUM No CSA/ ASE_{40}** (n (%))	**GUM ASE $only_{11}$** (n (%))	**GUM CSA_{10}[$]** (n (%))	**GP No CSA/ ASE_{292}** (n (%))	**GP ASE_{31}** (n (%))	**GP CSA_{38}[$]** (n (%))
Doctor	2 (5)	3 (27)	0	46 (16)	8 (26)	5 (13)
Mental health worker[5]	2 (5)	3 (27)	0	18 (6)	4 (13)	9 (24)
'Other' person[£]	3 (8)	0	1 (10)	17 (6)	2 (7)	3 (8)
Any help	6 (15)	4 (36)	1 (10)	71 (24)	13 (42)	12 (36)

Note: No man in the GUM sample reported receiving either drug therapy or an inpatient stay regarding mental health problems. Only ten men in the GP sample reported such forms of help (8 were men who reported no experiences and two who reported ASE).

Effect of interviewer on reporting

More men reported a mental health problem to the male interviewer than to the female interviewer (211/1092: 19%; 155/1247: 12%; $\chi^2 = 20.9$, 1 *d.f.*, $p < 0.000$; OR 1.7; 95% CI 1.3-2.1). Further, more men reported help received for a mental health problem to the male interviewer (70/21: 33%; 29/154: 19%; $\chi^2 = 7.3$, 1 *d.f.*, $p < 0.000$; OR 211; 95% CI 1.3-3.5).

[5] Counsellor/therapist/psychiatrist/psychologist

Part 9: Revictimisation

The first part of this section of the thesis considers associations with/predictors of any sexual revictimisation. The next part considers associations with/predictors of rape according to the SOA 2003.

Any sexual revictimisation - univariable analysis

The reader is reminded that revictimisation is conceptualised as reporting any form of sexually abusive experience in childhood and also reporting NVS after age sixteen. As hypothesised there was a significant linear trend in the reporting of NVS according to reported childhood sexual experience (MH $\chi 2$, 1 d.f. = 71.7, $p < 0.00$: Table 93)

Table 93 *Childhood experiences and rate of any sexual revictimisation*

	No experiences (n=2252) (n (%))	**ASE (n=219)** (n (%))	**CSA: no or-genital contact or intercourse (n=112)[$]** (n (%))	**CSA: or-genital contact or intercourse (n=41)[$]** (n (%))
NVS rate	52 (2)	18 (8)	12 (11)	8 (20)

$ irrespective of ASEs

Any sexual revictimisation - multivariable analysis

After controlling for potential confounders all of the hypothesised variables were significant predictors of NVS (Table 94). As predicted, the odds ratio for CSA involving orogenital contact and/or intercourse was the largest of all of the odds ratios for sexually abusive experiences in childhood (although the odds ratios for the different types of CSA experiences were virtually identical).

Table 94 *Predictors of 'general revictimisation' (NVS)*

Variable	**Crude odds**	**Adjusted odds (95% CI)**
CSA – orogenital contact and/or intercourse	7.4 $p < 0.000$ (3.3-16)	4.3 $p < 0.005$ (1.7-11.0)
CSA – no orogenital contact or intercourse	3.7 $p < 0.000$ (1.9-7.1)	4.2 $p < 0.000$ (2.1-8.4)

Variable	Crude odds	Adjusted odds (95% CI)
Assenting sexual experience	3.6 p < 0.000 (2.2-5.9)	2.1 p < 0.005 (1.3-4.2)
Participant reports male sexual partners	10 p< 0.000 (6.3-15.9)	4.6 p < 0.000 (2.5-8.4)
Age	0.97 p < 0.000 (0.95-0.98)	0.98 p < 0.05 (0.97-0.99)

Any sexual revictimisation - confounders

Men attending the GUM clinic were significantly more likely to report NVS in adulthood (OR 2.3; 95% CI; p < 0.006: (Table 94).

Rape according to the SOA 2003

As hypothesised, there was a significant linear trend in the reporting of rape according to the SOA 2003 according to reported childhood sexual experience (MH χ^2, 1 d.f. = 71.7, p < 0.00: Table 95).

Table 95 *Childhood sexual experiences and rape in adulthood according to the SOA 2003 definition*

	No experiences (n=2252) (n (%))	**ASE (n=219)** (n (%))	**CSA: no or-genital contact or intercourse (n=112)[$]** (n (%))	**CSA: or-genital contact or intercourse (n=41)[$]** (n (%))
NVS rate	10 (0.4)	6 (3)	4 (4)	2 (5)

Both CSA not involving orogenital contact or intercourse and reporting of male sexual partners were significant predictors of rape in adulthood according to the SOA 2003 definition (although CSA involving orogenital contact or intercourse was not a significant predictor (no confounders were significant): Table 96).

Table 96 *Predictors of rape in adulthood according to the SOA 2003 definition*

Variable	Crude odds	Adjusted odds (95% CI)
CSA – orogenital contact and/or intercourse	0.16 p< 0.05 (0.03-0.7)	2.3 NS (0.4-13)
CSA – no orogenital contact or intercourse	5.1 p < 0.005 (1.7-15.4)	5.1 p< 0.05 (1.3-19.3)
Assenting sexual experience	4.7 p < 0.001 (1.9-11.7)	2.1 NS (0.8-6.1)
Participant reports male sexual partners	96 p < 0.000 (35-260)	60 p < 0.000 (20-179)
Age	0.95 p < 0.003 (0.92-0.98)	1.0 NS (0.9-1.1)

Discussion

> *' ... the hope was that the survey would stimulate further social inquiry in this field, addressing new questions and posing fresh new ones by generating new hypotheses' (Wellings, Field, Johnson and Wadsworth, 1994)*

Before discussing the results it is worth mentioning at this point that there were no obvious adverse reactions to men regarding being asked to take part or actually taking part in this research. Thus, this research has demonstrated that it is feasible/possible to conduct very 'sensitive' research on a large sample of (English) men and that it is practical to use a computerised interview.

At the outset it is important to stress here that the findings from the GP sample do not represent findings from a 'formal' epidemiological study (i.e., data from a nationally representative, probability sample). Further, the findings from one GUM clinic could not be considered representative of GUM clinics as a whole. Second, it is also clear that while the vast majority of persons are registered with a GP, not all will visit their GP as regularly as others (see later). As such, this section does not set out to establish if the data from the GP sample are representative of the general population by comparing participant demographics with official statistics and weighting data accordingly (as would 'formal' epidemiological research). Thus, it is important to state that the findings of this research are not (and could not) claim to be representative of the general population. Rather, the research represents an initial attempt to learn more about a social problem that has remained largely under-researched (perhaps especially in Europe).

Overview

All of the hypotheses received some support. First, the prevalence rate of NVS (2.8%) was greater than that of Nelson et al (2002), but less than the 7.2% figure found by Sorenson et al (which likely included attempted NVS). The rate was very close to the rate (3.2%) in Plant et al's (2005) study. Further, and as hypothesised, the sexual experiences inquired about (NVS, CSA, ASE) were significant (or marginally significant after controlling for potential confounders) predictors of

- Deliberate self-harm (all reported experiences)
- Psychological disturbance and sexual problem(s) (both types of CSA experiences)
- Substance misuse (CSA involving intercourse and/or orogenital contact and the category any problem (both types of CSA experiences
- Any of the problems (both types of CSA experiences)

Consistent with the hypothesis the conflated CSA category was a marginally significant predictor of help from a mental health practitioner (although this was the only predictor that approached significance).

There was evidence to support the hypothesis that NVS with a male(s) is significantly associated with changes in sexuality and marginally significant evidence that NVS with a male is associated with confusion about sexuality.

Consistent with the hypotheses, there were significant associations between the reporting of male sexual partners and reporting of male perpetrators of NVS and ASE. This was not the case for CSA, however.

Consistent with the hypothesis there was (in the GP sample) a marginally significant association between male perpetrator and the victim reporting 'freezing' during NVS. This association was not significant in the GUM sample (although rates of 'freezing' were three times greater where a male perpetrator was reported).

The hypothesis that childhood sexual experiences (both types of CSA and ASE), reporting male sexual partners and younger age would be significant predictors of NVS was also supported.

Finally, the hypothesis that childhood sexual experiences would predict rape according to the SOA 2003 definition was partially supported.

Support for hypotheses is not unequivocal proof of the validity of findings, however. Accordingly, the next section of the thesis considers various factors that may have, or are likely to have, affected the validity of the findings. After this, the discussion is organised thematically, considering the following:

- Prevalence of reported sexual experiences (NVS, CSA, ASE)
- Characteristics of victims, perpetrators and circumstances of these experiences
- Mental health problems and help-seeking
- Revictimisation

Validity issues

This section considers variables that affect the degree to which it is safe to consider the research findings valid. These include reliability of reporting, sampling effects, interviewer effects and the construct validity of the definitions of sexually abusive experiences used in this research.

Reliability of reporting of sexually abusive experiences and mental health problems

Clearly, the test retest reliability assessment included only a few participants[1], and κ could not be computed for NVS, CSA or ASE experiences. The raw data suggest that there was little difference between reporting of information about a history of sexually abusive experiences at first and second interview NVS 95% agreement; CSA and ASE 100% agreement).

Concordance of reporting of psychological problems at first and second interview was perfect for a sexual problem, substance misuse and self-harm. The κ statistic for psychological disturbance was at the lower end of the 'good' range. Although the

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1. Very few men wished to repeat the interview. Anecdotally, this appeared to be due to the fact that the majority of men did not consider that the research was 'for' or 'about' them as they had not had any of the experiences inquired about. While the importance of participant's contributions was impressed upon these men, many still declined to participate a second time.

2. Recruitment at the GUM clinic needed to cease to ensure that an adequate sample of men from the GP population could be obtained. Further, data regarding test-retest reliability was not obtained from the GP sample since it was (correctly) hypothesised that the rate of NVS in that sample would be smaller. Thus, it would have been much harder to obtain repeat interviews from men who had experienced NVS. These men were particularly required for test-retest purposes since the stability of responses to an (expectedly) low base-rate event would have the greatest effect on the size and significance of κ. In short, simply adding more and more persons who did not report NVS to the test-retest reliability sample was likely to create an artificially high κ statistic (note Layman et al found high rates of consistency between non-victim's responses (99% agreement in those who reported no victimisation at first and second administration with first administration being the criterion for non-victim status, but lower levels of consistency – 84% - for those who reported an experience categorised as sexually abusive at first administration).

sample size was small, then, the data suggest reliable reporting of mental health problems. Numbers of men seeking help for psychological problems were too small to permit a reliability analysis (although there was no discrepancy between reporting of help seeking at re-test).

Clearly, it would have been much more helpful to have collected more data from the GUM clinic to have obtained a larger sample for the test-retest analysis. This is perhaps particularly important with respect to CSA and ASE experiences as neither of these were reported on either occasion. Nonetheless, the findings of the test-retest analysis do not suggest major problems with the reliability of reporting of sexually abusive experiences or mental health problems (although the time period between first and second interview was shorter than that used in previous studies (e.g., Dube et al, 2004; Fry et al, 1996).

Participation rate and sampling issues

Participation rates

GP practices
Clearly, the rate of GP surgeries taking part in the research was very low. Many practices did not respond (no follow-up letters were sent) and of those that did respond a frequent reason for non-participation was reported to be a lack of space for the researcher to conduct the interviews. This may or may not have been the genuine reason for non-participation.

GP/GUM patients
Participation rates in both studies were higher than in any community or GUM study reviewed in the introduction. Thus, there was no strong evidence that men were 'put off' by the research (although men who had had a sexually abusive experience may not have reported it when it was inquired about). No data were collected on men who were approached but did not participate and as such, it is not possible to tell if participation varied according to demographic factors, and this is an obvious weakness of this research.

Despite the fact that there is some evidence that people who have had a particular experience may be more likely to engage in research on that experience, it is also the

case that the most traumatised individuals may refuse to engage as avoidance of distressing stimuli is a diagnostic feature of Post Traumatic Stress Disorder (APA, 1994). As such, it is possible that the participation rate (and, by extension, prevalence rate) may have been affected by different forms of differential participation.

Sampling issues

Geographical location of GUM clinic and GP practices

It is clear that the practices that participated in the study were not representative of general practices in England. This is true both of their type (only those with more than six GPs were approached) and their geographical spread (the majority were in London or Surrey/Hampshire). Half of the general practices were in London (as was the GUM clinic) and this could have affected the results as it is known that numbers of heterosexual partners (lifetime and previous five years) and rates of homosexual partners (ever and in the last five years), concurrent relationships and having paid for sex are all higher in men in greater London than in the rest of Britain (Johnson, Mercer, Erens, Copas, McManus, Wellings, Fenton, Korovessis, MacDowall, Nanchahal, Purdon and Field, 2001). It is possible, that, in addition to reporting male sexual partners (which is strongly associated with also reporting sexually abusive experiences) other factors such as a greater number of sexual partners and paying for sex may also increase the risk of a sexually abusive experience. As such, the generalisability of the findings from a study with a large proportion of participants from Greater London (as here) to England as a whole is questionable.

Survey sites

The study was conducted in a GUM clinic and GP surgeries as these were considered to be places where men are likely to be familiar with inquiries about sensitive topics and also places where help was readily available if a participant became distressed. There may have been an unintended consequence of using these sites for research which could impact upon the validity of the results obtained, however. This is because research shows that rates of sexually abusive experiences are higher in GUM clinic attendees than in the general population (Dunne, 2002). Further, it is also known that childhood adversity is associated with higher levels of health care utilisation (Kapur, Hunt, MacFarlane, McBeth and Creed, 2004) and that rates of rape are much higher in (female) primary care attendees than in the general population (Koss et al, 1991).

There is also evidence that adverse childhood experiences (ACEs: including childhood sexual abuse) are associated with an increased odds ratio of self-report of ever having had a sexually transmitted disease, and this appears to be a 'dose-response' relationship with odds (controlling for age and ethnic background) of 1.46, 1.67, 2.2, 2.1, and 5.3 for persons reporting 1, 2, 3, 4-5 and 6-7 forms of ACE respectively (Hillis, Anda, Felitti, Nordenberg, and Marchbanks, 2000).

It seems likely, then, that the use of GP/GUM sites could lead to an over-estimate of the prevalence rate of sexually abusive experiences. In other words, in Dawes' (1993) terms, the use of these samples could represent 'conditioning on the consequent', rather than 'conditioning on the antecedent'.

The essence of Dawes' (1993) argument is quite simple in that it is obvious that if we know that sexual abuse and help seeking are associated we will find higher rates of sexual abuse in those seeking help (conditioning on the consequent) than we will help seeking in those sexually abused (conditioning on the antecedent). The common finding that rates of sexually abusive experiences are higher in psychiatric patients than in the general population is likely another example of 'conditioning on the consequent'. It is also obvious from following Dawes' (1993) analysis that the size of associations between (in this case) sexually abusive experiences and mental health problems may represent overestimates. For example, using Dawes' (1993) argument Kihlstrom, Eich, Sandbrand, and Tobias (2000) show that an estimate of the association between smoking and lung cancer is higher when investigating this relationship in cancer patients in an oncology clinic than in a community sample of smokers. Thus, the choice of research sites – while affording safe places for disclosing sexually abusive experiences – could have led to increased prevalence estimates and also to 'artificially high' associations between sexually abusive experiences and mental health problems and help seeking.

Interview completion rate

Overall, the interview completion rate was high. The completion rate of the NVS section was lower in both samples, however. The completion rate was lower in the GUM sample with thirty per cent of men not completing this section. Anecdotally, the

main reason for men not completing this section of the interview appeared to be that interviews involving NVS took longer to complete and men who reported this experience were often called away during the interview and then did not return to complete the interview. This appeared particularly common in the GUM sample where the waiting time to see staff was (anecdotally) shorter than in the GP sample. It is of course, possible that men who reported NVS and who were called away but did not return could have found the interview stressful and did not return for this reason. There are no data on this, but anecdotally there was no sign of obvious distress observed in men who reported NVS experiences. It seems possible, however, that men reporting these experiences may have thought that the interviewer could tell that they were reporting an unwanted sexual experience (because they took some time doing the interview) and not returned due to feeling embarrassed. Whatever the cause of non-completion it is clear that while the methodology may have led to good participation rates, it may also have affected the completion rate as men were sometimes called away to see clinic/surgery staff during the interviews.

It is clear that the non-completion rate could have affected the results (e.g., associations between NVS and CSA/ASE and mental health problems). This may have been particularly true of men who reported NVS and who then were asked about CSA also. Men who had had both of these experiences may have responded in the negative to inquiry about CSA as a means of not asking questions about these experiences (after having answered many questions about NVS).

In retrospect it may have been better to have asked questions about whether men had experienced NVS, CSA and ASE at the start of the interview and then later asked about the characteristics of these experiences. The primary goal of the research was to obtain information about the prevalence and characteristics of NVS, however.

Characteristics of participants

This section considers data from the GP sample only as it is obvious that data from one GUM clinic cannot be representative of those attending GUM clinics.

Ethnicity

The vast majority of the men in the GP sample were white (a far greater proportion than in the GUM sample). The rate of white men in the GP sample is similar to the

proportion of white persons in the general population (93%: Bridgewood, Lilly, Thomas, Bacon, Sykes and Morris, 2000). Given that the sample included a large proportion of men in Greater London, it seems likely that the proportion of non-white men may be lower than in the geographical areas from which data were recruited, however. Demographic data from men who did not participate would have been helpful in understanding whether disproportionate numbers of non-white men had refused to participate.

Occupational class

Nearly one in sex of the men in the GP sample were non-manual workers. This is higher than the rate (49%) of non-manual workers in a random sample of participants in a large random sample survey of persons in Britain (data for males and females and excluding persons from the Highlands and Islands of Scotland: Jenkins et al, 1997). Again, however, it is difficult to if know rates of manual/non manual workers are consistent with the actual areas from which the data were collected. The data do not suggest, however, that the occupational class of participants was greatly different from the general population.

Age

The age of participants in the GP sample ranged from 18-88 and was greater than the age range of other studies of NVS reported in the introduction. Men aged 16-17 were excluded (as they were not deemed old enough to give consent). The prevalence estimates of sexually abusive experiences do not include data for these men and this may particularly affect the reporting of ASE (as these experiences are reported more common in younger men). Excluding men aged 16 and 17 may also have affected the prevalence rate of NVS (although the mean age of first experience of NVS was 19 (male) or 21 (female) depending upon perpetrator gender).

Sexuality

Three per cent of men in the GP sample reported male sexual partners (the rate in the GUM clinic was more than seven times greater). This rate is lower than the number of men who report ever having had a homosexual experience (8.4%) in a large probability sample of British men (Mercer et al, 2004). There may be (at least) two reasons for this. First, Mercer et al's (2004) sample only included men aged 16-44 and there is evidence that younger men are more likely to report homosexual experience (Mercer et al, 2004) and being gay, homosexual or heterosexual but sometimes having males sexual

partners (see the linear trend analysis for reporting of male sexual partners in this study). Thus, it would be expected that the prevalence rate of homosexual experience would be higher in younger men. Second, Mercer et al's (2004) definition of homosexual experience includes experiences such as ' ... kissing and touching that did not lead to genital contact'. It may be that men who have kissed or 'fondled' another man on a single occasion or infrequently would not consider that they had had sex with another man. Indeed, it is possible that the definition of sexuality used in this study may have resulted in a lower prevalence estimate of reporting of male sexual partners since a heterosexual man who occasionally had sexual contact with other men may not have classified himself as 'straight, but sometimes have sex with men' if he construes 'have sex' to mean anal – or indeed vaginal - intercourse. Thus, the lower rate of reporting of male sexual partners in the GP sample (compared with Mercer et al, 2004) may be due to definitional issues as well as other factors such as sampling site etc. These arguments obviously also apply to the way in which men in the GUM sample may have defined their sexuality.

Interviewer effects

Rates of NVS, CSA, and ASE were all significantly higher according to (male) interviewer. These findings are somewhat similar to those of Catania et al (1996) and Tjaden and Thoennes (2001). Importantly, however, subsequent analyses found that the interviewer had no effect on the reporting of various characteristics of the victim or the sexually abusive experience(s) (with the exception of a significantly higher rate of reporting of sexual intercourse with a female when reporting ASEs). Thus, it appears that the effect of interviewer was to inhibit reporting of the *presence*, but not *characteristics* of sexually abusive experiences.

Rates of all of the categories of mental health problems in adulthood and adulthood were all significantly higher according to (male) interviewer (reporting of help from a mental professional for a mental health problem in adulthood was also marginally significant higher according to male interviewer). Further, the rate of reporting help for a mental health problem in childhood was also higher according to male interviewer.

The different rates of sexually abusive experiences according to interviewer should not necessarily be taken for support for Catania et al's (1996) contention that men should be employed to interview men about a history of NVS. First, the interviewers in this

study differed not only in their gender, but also their ethnicity (white male, black female). Thus, ethnicity, rather than or in addition, to gender may have impacted upon the significantly different rates of reporting of sexually abusive experiences. Further, it is also clear that interviewers recruited significantly different proportions of men with regard to the type of area in which they lived, their occupational and relationship status, and also their ethnicity (but not their sexuality or age). As such, the significantly different rates could be due to factors other than the physical characteristics of the interviewers.

'Subtle' differences in interview conditions may have also have affected the results. For example, although there was a strict protocol for recruiting men, demonstrating the interview, and positioning so as to avoid seeing the computer screen, factors such as staying in/or leaving the room could have been relevant. Anecdotally, both interviewers found that the space available was often too small to allow two people to stay in the room and standing outside the room may have led to increased reporting of highly sensitive behaviours compared to being in the room. Thus, differences in physical resources may have affected the obtained results.

Finally, it is also known that some interviewers 'openers' are better at eliciting self-disclosure than others (Schaffer, Ruammake and Pegalis (1990). While these findings apply to face-to-face e interviews it could be that, on average, the general 'tone' of the interview situation was more conducive to disclosure of sexually abusive experiences with one interviewer compared to another. Note, however, that this would likely be an 'average' effect, since interviewers may have (unintentionally) set (or interacted with the participant) to set a tone which was/was not conducive to disclosure as the characteristics of those interviewed also varied significantly according to interviewer (as did the environment in which the interview took place).

It is clearly not the case that firm conclusions can be drawn regarding interviewer effects in this study due to the small number of interviewers (n=2) and the fact the participants recruited by interviewers differed significantly on a number of characteristics. Clearly, interviewer effects can only be properly investigated where the sample size of both interviewers and participants is large enough to permit a multivariable analysis (as did Daily and Claus, 2001). Future research could set out to achieve this from the outset (it may also be possible to perform subsidiary analyses on

other large datasets such as those of Percy and Mayhew, (1997) Walby and Allen, (2004) or deVisser et al (2003))

Definition of NVS, CSA and ASE (construct validity)

There are two obvious difficulties with interpreting the data with regard to reported NVS. First, it is clear that the definition allowed for a wide variety of 'sexual' acts to potentially be construed as NVS and lead to an affirmative response. It seems likely that the affirmative responses to the NVS question included a spectrum of sexual acts from relatively 'minor' experiences to rape. deVisser et al (2003) acknowledged this possibility in their research:

> *'This broad definition of sexual coercion therefore included behaviours ranging from an unwanted kiss or fondle to assault or rape'*

The likely spectrum of seriousness of NVS reported in this study will obviously have important implications for whether or not the participant experiences distress and/or physical injury. For example, a brief experience of 'forced' kissing may (or may not) be distressing at the time, but not likely lead to physical injury or a mental health problem. Nonetheless, a participant may consider it necessary to report the experience in this research.

Second, participants must decide if a given sexual experience took place only because of them being coerced or forced in some way. Such decisions may not be easy to make (see the research of Hamby and Koss (2003) in the introduction) and participants may be unsure about how to respond. Some examples from men who took part in the research may illustrate this point.

Example 1

A participant reported that a previous 'new girlfriend' ('going out' for about three months, and having sex for about two and a half months) had asked him to have anal intercourse with her. He explained that he found this sexual act disgusting and had declined her multiple requests for him to have anal intercourse. He reported that on one occasion, however, she had purposely got him drunk and that she inserted his penis into her anus 'before he realised what was going on' (she admitted to this as a means of getting him to 'try' the behaviour). He reported realising what had happened,

withdrawing his penis and being unhappy about this and telling her so. No further anal intercourse took place between them, though they did continue to have a sexual relationship for a number of months before they 'finished'.

Example 2

A man queried what his response to the NVS question should be. He explained that as a builder he was obviously very tired by Friday night (when he liked to go to bed relatively early). He explained that often his girlfriend would go out on Friday nights with her friends and on more than one occasion had come home very drunk and insisted on sexual intercourse after waking him in the early hours. He said that if he declined she would become very angry and sometimes slap him or throw things around their bedroom. The man reported that, at such times, he would then have intercourse with her just to put an end to her behaviour and thus get back to sleep sooner. The man stated that he was not sure if she had made him have sexual intercourse as she had not held him down or threatened him with a weapon or whatever. Further, he said that she could not really do this anyway as he was large (he was over six feet tall and probably weighed about sixteen stone) and she was only about five foot six. The man reported that while this behaviour "pissed me off at the time", he was not really upset about it too much.

Both men appeared sincere when stating that they did not feel that they had been 'harmed' by their experience(s).

These examples make clear the difficulty survey participants have in deciding whether their personal experience 'is what the research is about'. Such difficulty was eloquently expressed by one of the participants in Hamby and Koss' research:

> *'I have a comment .... When you're doing a survey, the amount of people that you're going to be dealing with, they're no used to ... these words [force, coercion] and in some cases, they may not even understand exactly what you mean. You have to break it down because you're dealing with the common person and you guys are all doctors. When creating surveys like this, I think that has to be taken into consideration'*

The examples also highlight that decisions about the 'severity' of sexual experiences (and assumptions about how distressing they may be) between adults should not

(necessarily) be based upon the nature of the sexual act alone, but also likely upon the research participant's rating of the degree of force distress, and/or fear at the time of the experience (deVisser et al, 2003).

Understanding NVS is also complicated by research on 'ambiguous communication' of sexual intention (Krahe et al, 2000). High rates of both heterosexual (46%) and homosexual (52%) men report (presumably at least one) instance of 'token resistance' (participants were asked:

> *'have you ever been in a situation where a man (a woman) wanted to have sexual contact with you, but you said 'no' even though you had every intention to and were willing to engage in sex with him (her). In short: "have you ever said 'no' when you meant 'yes'?'")*

in their sexual encounters. This is important since it has been found that such token resistance is a predictor of reporting NVS by adult women and by MSM (Krahe et al, 2000: this link was not studied in heterosexual men, though the link between perceiving token resistance in women and perpetration of a sexually abusive experience was). Such ambiguity may lead to NVS due to perpetrators 'learning that no does not really mean no' and thus encouraging them to persist in making sexual advances (Krahe et al, 2000). It is possible that men in a relationship where they have exhibited such token resistance with sexual partner X may then experience NVS perpetrated by sexual partner X and then 'not blame' the perpetrator as they take responsibility for the NVS experience by reasoning that their behaviour was inconsistent and that the other person could not have been sure that they *'really meant no'*. This is, of course, an empirical question. These findings demonstrate, however, a 'mechanism' by which MSM may increase their risk of experiencing NVS. This mechanism may also be relevant for heterosexual men as it is known that women engage in variety of behaviours to obtain sexual activity after first being refused such activity by a man (including removal of the man's clothing and 'taking advantage of a drunken target': Struckman-Johnson, Struckman-Johnson and Anderson, 2003). This may also be true of MSM.

Research also demonstrates that many men (52%) who report male sexual partners report engaging in 'token compliance' (saying yes and meaning no) in their sexual encounters (Krahe et al, 2000). Perhaps unsurprisingly, reporting 'token compliance'

(participants were asked: 'have you ever been in a situation where a man wanted to have sexual contact with you and you said 'yes' even though you did not actually want to have sex with him? In short: have you ever said "yes" when you meant "no"?') was a significant predictor of NVS[2]. Again, Krahe et al's (2000) findings suggest another important mechanism by which men may experience NVS. It is clear, however, that much token compliance not associated with coercion. For example, O'Sullivan and Allgeir (1998) found that 26% of men in their sample reported consenting to unwanted sexual activity[3] and that 38% of these men consented to unwanted sexual activity to satisfy their partner's needs and/or promote intimacy. It is also possible, however, that men may consent to unwanted sexual activity for 'less positive' reasons: O'Sullivan and Allgeir report that 48% of the men in their sample who reported consenting to unwanted sexual activity did so to 'avoid relationship tension'. The severity of this tension and the consequences of not avoiding it are obviously unknown.

It seems likely that token compliance may be observed in a variety of sexual contexts. Some of these contexts may be considered to represent NVS either by researchers or even the police, but not by the men who experience them. It seems possible, however, that men who have exhibited token compliance may be unsure about how to respond to the question about NVS posed in this study. Indeed, Example 2 outlined above may be a paradigmatic example. This man was clearly unsure about whether or not to respond in the affirmative since he had clearly 'given in' to his partner and then engaged in sexual activity with her. This raises the interesting possibility that it is the final decision ('saying yes') about engaging in sexual contact rather than the events preceding the decision that are more important in the decision about whether or not a sexual encounter was wanted/forced etc. This is, of course, an empirical question and one that could be addressed by social psychologists.

Recollection of abusive experiences

Currently, there is much debate about false and 'repressed memories' of child sexual abuse (see for example, Ceci, Gilstrap and Fitneva, 2002). A review of the validity of

[2] Krahe et al point out that their participants were explicitly instructed to ' ... report only those situations in which they had given in to a man's advances without the man using some means of force or coercion' to ensure that the relationship between such compliance and reporting of NVS were independent.

[3] It is important to note that tere was a difference between the definitions used in this study and that in the study of O'Sullivan and Allgeir, in that although both studies used the same 'label', for the experience this research specified that the unwanted sex was somehow forced on the person. It is accepted, of course, that a person may feel that even implicit 'pressure' to maintain a relationship may be construed as some type of force

retrospective recollection of abusive experiences in childhood concluded, however, that 'Provided that good interviewing techniques or good quality questionnaires are employed, it seems unlikely that this [false/recovered memories] constitutes a serious problem in the use of retrospective recall in epidemiological studies' (Hardt and Rutter, 2004). Unfortunately, it is not possible to tell if the interview used here would qualify as good quality as Hardt and Rutter do not specify what a good quality interview is.

The prevalence rate of CSA could possibly be reduced by a failure of recollection of the event due to it happening at a very early age. There are reports of sexual abuse of very young boys. For example, Saradjian (1996) reports that some of the female sexual offenders she assessed started abusing their sons in infancy. Various explanations for such infantile amnesia exist, but it is argued that ' ... it is clear that adults cannot be expected to have an accurate recall of events that took place in infancy (Hardt and Rutter, 2004).

Differential participation

There is evidence that persons who have experienced CSA may be more likely to engage in research on the topic (Gorey and Leslie, 1997. Such differential participation was possible in this research since it was made clear that the research involved inquiring about unwanted experiences it is possible that men who had experienced CSA were more likely to engage in the research. Differential participation may have had an effect on reporting of any of the sexual experiences inquired about. Indeed, one man who said that he had reported an experience of NVS after completing the interview stated that he had wanted to 'tell someone' about the experience for a long time, but had not felt able to do so.

Prevalence of NVS, CSA and ASE

This section reviews the prevalence findings and considers factors that may have increased or decreased the prevalence rates obtained. As with other sections, primacy is given to NVS data

Prevalence of NVS

The prevalence rate of NVS in the GP sample s similar to that of the most obvious (i.e. British) comparison samples of Plant et al (3.2%) and Walby and Allen (2.1%). The rate was much lower than that reported by McGee et al (2002), and Sorenson et al

(1989), however (although the definitions were very different.). The rate of NVS was higher than in the period prevalence studies of Schafer et al (2002) and Norris et al (2002) (but was lower than that of Feehan et al (2001)).

The rates of NVS reported by deVisser et al (Australia: 2%) and Elliott et al (USA: 3.8%) are also relatively similar to the rate obtained in this study (and both are derived from probability samples, although mode of inquiry differed).

Rates are difficult to compare, however, since, for example, Plant et al (2005) and Walby and Allen (2004) used probability samples. Further, Plant et al (2005) used face-to-face interviews (with variations in rates of reporting attributable to interviewer not reported), while Walby and Allen (2004) used a CASI (but their definition included *attempted* sexual assault). The definition of NVS in this and Plant et al's (2005) research were not identical, although definitions stressed the unwanted nature of the activity and indicated the use of force and inquired about sexual activity rather than being specific about a particular sexual act (e.g., rape or being forced to 'have sex'). It is in some senses surprising that Plant et al (2005) found a slightly higher rate of NVS as this research used a mode of data collection found to increase reporting. It is obvious, however, that many factors explain prevalence rates obtained in any study.

It seems clear that there is no strong evidence for an increase in the prevalence of NVS due to sampling from the GP clinic (i.e., potentially conditioning on the consequent), as the rate of NVS was lower in this study than that in Plant et al (2005). It is possible, however, that some men in this study may not have reported 'minor' NVS experiences which did not affect them greatly as they may have perceived that the 'context' of the research ('medical research' taking place in a GP surgery suggested only more serious – or very serious – forms of NVS).

The prevalence rate in the GUM sample was higher than that of the GP sample and was higher than the rates reported by Keane et al (1995) and Petrak et al. (1994) However, rates are difficult to compare due to differences in definitions of NVS and mode of inquiry. The higher rate of NVS found in this sample is likely due to a number of reasons: 1) The sample contained a much higher rate of MSM and having male sexual partners is associated with an increased rate of reporting of NVS; 2) Men in this sample reported higher rates of CSA/ASE in GUM and these are associated with NVS; 3) Men

who have experienced NVS may go to GUM clinics to get 'relevant' treatment (with or without disclosing) NVS.

The reader is reminded that the proportion of men who experienced NVS and who considered them selves to be a victim of a sexual crime is unknown. In short, the prevalence rates obtained should not be construed as the rate of 'sexual crime' experienced by men attending their GP or a GUM clinic.

NVS rate and demographic factors

The prevalence of NVS did not differ according to occupational class in either sample. Neither Sorenson et al (1989) or Flett et al (2004) present data on occupational class, while deVisser et al (2003) report that occupational classification did not differ significantly in men with/without a lifetime history of sexually abusive experiences (although those with higher earnings were less likely to report experiencing a sexually abusive incident(s)). In summary, there is no strong evidence currently that NVS is more likely to be reported by men in different occupational classes.

The prevalence of NVS did not differ according to ethnic background (white vs. non-white) in either sample. Contrary to this, Sorenson et al (1987) found that NVS was more common in non-Hispanic whites; Flett et al (2004) found that recent sexual assault was more common in Maori (vs. other ethnic groups: although these data are for males *and* females) or in men in Australia whose language spoken at home was not English (although this was for lifetime experience of NVS: deVisser et al, 2003))[4]. The findings regarding ethnic background and experience of NVS are complicated in the GP sample however since the proportion of non-white men is likely smaller than that in the general population (see above). It is clearly the case that the only way to be sure that NVS is not associated with ethnic group or occupational class in the UK would be to conduct a large-scale study on a representative sample of the UK population.

Reporting of male sexual partners was significantly associated with NVS in both samples. This finding is consistent with much previous research on MSM (e.g., de Visser et al, 2003; Balsam et al, 2005)

[4] This variable may serve as a proxy for non-white ethnic group

A linear trend analysis of the GP sample data found that younger men were more likely to report NVS than were older men. This finding is considered later on in the section on characteristics of NVS experiences.

Prevalence of child sexual abuse

The prevalence of CSA in the GP sample was within the range of prevalence (4-16%) found in large (>1000 participants) studies (see Holmes and Slap, 1998), but lower than that found by McGee et al (2002). It is, however, very hard to compare rates due to wide variation in definition (e.g., this rate did not include ASE's which would be included in one definition is some studies), mode of inquiry, sampling and age at which childhood is considered to end (e.g., 17 in McGee et al (2002); see Holmes and Slap, 1998). The CSA rate in the GUM sample was considerably higher than in the GP sample and is qualitatively similar to the findings of Dunne et al (2002) who found that the prevalence of sexually abusive experiences was higher in women recruited from a GUM clinic than in women recruited from the general population.

CSA rate and demographic factors

Unlike NVS, there was no evidence for a significant linear trend for reporting of CSA according to age. This suggests that the rate of CSA (in this sample) has not changed over time.

As with NVS, the prevalence of CSA did not differ according to occupational class in either sample. These findings are counter to studies reviewed by Holmes and Slap (1998) that found that CSA was more common in boys from lower socio-economic status households. A recent study (May-Chahal and Cawson, 2005) on a large (n=1234) probability sample of men in the UK did not report on the effect of demographic factors on CSA and so it is not possible to compare data from the sample to the probability sample.

The prevalence of CSA did not differ according to ethnic group in the GP sample, but was marginally significantly greater in the non-white ethnic group in the GUM sample. Holmes and Slap (1998) report that much research on small samples (as with the GUM) has found that CSA is more common in non-white boys.

The prevalence of CSA was significantly greater in men who reported male sexual partners in the GUM sample, but not in the GP sample. This is contrary to the finding of Balsam et al (2005) who found that CSA was significantly more common in their community sample of gay and bisexual men. The reason for this finding is not clear, although the rate of reporting of male sexual partners in the GUM clinic was more than seven times greater than in the GP clinic and, as such, the lack of association in the GP sample may be due to a lack of power (i.e., a type II error) rather than a true lack of association. This possibility could be assessed by a larger study (or by a re-analysis of de-Visser et al's (2003) data).

ASE rate and demographic factors

As with NVS and CSA, the rate of ASE was higher in the GUM sample. Data from the GP sample found that younger men were significantly more likely to report ASEs. There may be a number of reasons for this. First, younger men may find it more acceptable to report these experiences. Second, there may be a change in sexual behaviour over time with younger men being more likely to seek these experiences before sixteen than their older counterparts. Third, it may be that the proportion of older persons prepared to engage in sexual behaviours with younger persons has increased over time. Recent British data do not appear to support the latter two reasons since it found no trend for a decrease in age at first heterosexual intercourse in British men aged 16-44 (Wellings, Nanchalal, Macdowall, McManus, Erens, Mercer, Johnson, Copas, Korovesis, Fenton and Field (2001).

There are, however, a number of reasons why Wellings et al's (2001) data may not contradict the findings from this research. First, the age range of participants included in the studies is very different (this study 18-88). Thus, Wellings et al's (2001) data assessed for trend in a much smaller age range of persons. Second, this study inquired about sexual experiences between persons below 16 and those who were five, or more years older. Wellings et al (2001) inquired about age at first consensual sexual intercourse. It seems perhaps likely that the majority of these experiences occurred between persons who were within a five-year age gap of each other. Indeed, the men reporting first experience of intercourse in Wellings et al's (2001) study could have reported first intercourse with a *younger* person. Finally, Wellings et al (2001) inquired only about sexual intercourse, whereas this research inquired about 'sexual things' (likely a much wider repertoire of behaviour). Thus it seems likely that although the

data from this study and the data from Wellings et al's (2001) data may appear contradictory this is perhaps not actually the case.

Unlike men in the GUM sample, men in the GP sample who reported male sexual partners were significantly more likely to report ASEs This finding suggests the possibility either that these men are more 'willing' to engage in sex with older persons before age sixteen and/or that older persons (predominantly women) are more likely to engage in sex with them. This is clearly an important area for research.
Unlike CSA, the reporting of ASE's was significantly associated with manual occupational class in both samples. The reason for this is not clear, although this finding demonstrates the importance of inquiring separately about these experiences. It may be that previous research that used a definition of CSA that would have included both CSA and ASE could have found no effect of occupational class on these experiences.

The rate of ASE did not vary according to ethnicity in the GP sample, but ASEs were more common in non-white persons in the GUM sample. The reason(s) for this is not clear, and it seems unwise to speculate from such a small sample derived from one GUM clinic.

Characteristics of sexually abusive experiences

NVS

Age at which men experienced NVS

The mean age at which men in the GP and GUM samples first experienced NVS was very similar, and data are consistent with the findings from a number of studies in GUM clinics (Keane et al; Lacey and Roberts, 1991) and the community (Clinics: Isely and Gehrembeck-Shim, 1997; Community: Briere and Elliott 2004; Sorenson et al, 1987).

The age of first experience of NVS with a male was marginally significantly younger than first occurrence of NVS with a female (there were no such significant differences in the GUM sample). The reason for this is unknown, but it could be due to more ambiguous sexual communication (Krahe et al, 2000) in younger men, or be due to perpetrators of NVS against males 'preferring' (or being more able to force) younger men.

Analysis of data from the GP sample found that NVS was significantly more common in younger men and this is consistent with the findings of NVS in young adulthood (18-30) in McGee et al (2002), but not deVisser et al (2003; although these data were for lifetime experience of a sexually abusive event(s) and included men aged up to 59 only). Possible reasons for the higher rate of N VS in younger men were considered earlier in the discussion.

While the data strongly indicate that NVS is more common in younger men it is important to recognise that older men may also experience NVS – the oldest age at which a man first reported NVS in these studies was 46 years in the GP sample and 37 years in the GUM sample.

NVS as first experience of sex with another person

In the GP sample a larger proportion of men reported that their first (only) experience of NVS occurred with a male. In the GUM sample, however, rates of first (only) experience of NVS with a male or a female were very similar. Of course, it is possible that participants may have used different criteria when deciding what constitutes 'sexual things' (see, for example, Randall and Byers, 2003). The data do suggest, however, that lack of sexual experience (perhaps more so with males) may be an important factor in the experience of NVS. It would clearly be interesting to know if ambiguous sexual communication (Krahe et al, 20000) was more prevalent in men for whom NVS was their first experience of 'sexual things' with another person.

Number of NVS experiences

Rates of men experiencing more than one episode of NVS were higher in both samples than in McGee et al's (2002) study. This may be due to differences in definition of NVS. In the GP sample, the majority of men had had only one experience of NVS where either a male or female perpetrator was reported. In the GUM sample, however, the majority of men had more than one experience of NVS where a male perpetrator was reported (with the majority of men experiencing having only one experience where a female perpetrator was reported). Although the duration of NVS experiences was not inquired about in this research, McGee et al (2002) have shown that NVS continues for more than a year in men reporting more than one NVS experience. The data show,

however, that multiple experiences of NVS are not uncommon in men and qualitative research would be helpful in understanding this further.

Perpetrator gender

The majority of perpetrators in both samples were male[5]. As previously discussed most research on NVS does not inquire about the gender of the perpetrator (and may - incorrectly it seems - assume that all NVS against males is perpetrated by males, e.g., Elliott et al, 2004), and these data support the importance of ascertaining the gender of the perpetrator of NVS. Research indicates that only a small minority of men who present at clinics report NVS perpetrated by a female. For example, Stermac et al (1996) report that female perpetrators were involved in only 2/27 cases of men attending a sexual assault referral clinic, while Hillman et al's (19990) analysis of 28 cases of NVS at a GUM clinic found that women were involved in only 4/28 cases. Data from Isely and Gehrembeck-Shim's (1997) large study of men attending agencies that provide help to men who had experienced NVS found that women were involved in a small proportion of cases. There is considerable discrepancy, then, between the gender of female perpetrators of NVS reported in the GP and GUM samples and the gender of female perpetrators where men present at specialist clinics for help after experiencing NVS. This may be due to 'less serious' forms of NVS being reported in this research.

Sexuality of male perpetrators

These data should be interpreted with some caution since it seems likely that, at least in cases where the male perpetrator is not well known, research participants who experienced NVS with a male may automatically assume that the perpetrator is gay/bisexual. For example, Hickson et al have argued that labelling male on male NVS as homosexual confuses the gender of the people involved with their sexual orientation. No epidemiological data has previously inquired of NVS victims' perception of the sexuality of a male perpetrator and as such comparisons with other large studies cannot be made.

The most frequently endorsed item in both samples was thinking that the perpetrator was gay (although this may be attributable to the point raised immediately above). The

[5] Note that the GUM data are for the most serious experience and therefore the true rate of female perpetration in that sample is unknown.

fact that a number of men in the GUM sample reported NVS with a man they knew to be gay supports previous research documenting NVS in gay relationships (Waldner et al; Hickson et al, 1994). The finding that a number of men reported knowing that the perpetrator was heterosexual is consistent with previous research which also reports the perpetration of NVS by men who are believed to be heterosexual (Hillman et al, 1990; Hodge and Canter, 1998), suspected of being heterosexual due to their behaviour (e.g., because of anti-gay abuse during an assault on a gay man: Hickson et al, 1994) or identify themselves as heterosexual (Groth and Burgess, 1980). Whatever the sexuality of the male perpetrator, it is clearly the case that there is a need to conduct research into perpetrators of sexual assault against adult males.

Use of alcohol at time of experiencing NVS

In the majority of cases research participants had not been drinking, or did not feel drunk at the time of their first (or only experience of NVS). This may not be the case for any subsequent experience of NVS, of course. Alcohol clearly impairs both judgment and (potentially) capacity to resist NVS and it may also be associated with ambiguous sexual communication (Krahe et al, 2000) and this is an obvious area for research). Although there was no strong, 'causal', evidence here, there seems some evidence that alcohol use is associated with NVS experienced by males. Tewksbury and Mustaine (2001) used a number of variables to predict the reporting of 'general', or 'serious' sexual assault risk in the previous six months by American male college students. Frequent use of alcohol was a significant predictor of both of these experiences, while the variable 'drinks liquor more often than beer or wine' was a significant predictor of serious sexual assault risk only. A further analysis found that the variable 'Frequently spends leisure time at bar where he is a regular' was also a significant predictor of general sexual assault victimisation risk. Thus, it seems likely that it is not only the use of alcohol, but the environments (e.g., meeting strangers in bars) in which alcohol is consumed that are important in NVS.

Location of NVS experience

The majority of NVS experiences took place in the home of the perpetrator or the victim. These data are not consistent with the findings of McGee et al (2002). The findings are, however, are consistent with those of Mezey and King (1989)[6]; and assaults reported by male acquaintances and female acquaintances reported by men in

[6] Combined % of NVS occurring in victim's or perpetrator's homes

Stermac et al's (2004) study of men attending a specialist clinic. Lower rates of NVS occurring in either the Victims or perpetrators homes were reported by other researchers (although still higher than McGee et al: (2002) Lacey and Roberts (1991), Kimerling et al (2002); Hodge and Canter (1998); Isely and Gehrembek-Shim, (1997)). In summary, the findings from this community study are broadly similar to those of studies in specialist clinics with regard to the location of NVS experiences.

The single report of an NVS experience in a custodial environment supports previous research of the occurrence of NVS in such environments (see Coxell and King (2000) for a brief review).

Identity of NVS perpetrator

Many men reported NVS with known persons (e.g., intimate partners, friends). This finding is broadly similar to the rates of known persons reported in other research (for example, Isely and Gehrembeck-Shim, 1997; King and Woollett, 1997), although the rate of NVS with a known perpetrator was lower in Keane et al's (1995) study (although numbers were small). Rates of reporting of NVS by relatives were low (as in McGee et al's (2002) research, which found that no male relative perpetrators were reported).

The rate of 'acquaintance' perpetrators was very high for male perpetrators in the GUM sample. These data seem similar to Petrak et al (1995) and Stermac et al's (2004) studies of NVS in STD clinic patients which found that half of male victims experienced NVS with a stranger. The rate of acquaintance perpetrators (female in the GUM and male and female in the GP sample) were quite similar to rates reported by McGee et al (2002).

Genital activity of victim during NVS

Before discussing these findings it is important to point out that it is possible that a proportion of cases where NVS took place occurred before, during, or after some other form of consenting sexual activity took place. Recall that Hickson et al (1994) found that in approximately 30% of rapes the victim had been engaging in consenting activity before the rape took place. Thus, the report of genital activity by the victim should not lead to the conclusion that such activity was a direct response to an unwanted sexual

experience- victims may be reporting that such activity was present around the time of the NVS.

Most men reported erection or ejaculation when experiencing NVS (irrespective of perpetrator gender). Rates of reporting of erection, ejaculation or both were higher where female perpetrators were involved in the GP sample. This finding could be due to the fact that most victims were heterosexual and that they may have been engaging in some form of consensual activity with the female perpetrator at the time. Nonetheless, the data show that a sizeable proportion of men report experiencing erection, ejaculation or both when experiencing NVS with a male[7]. Doubtless the NVS experiences reported here cover a wide range of severity and it is not known if the genital responses reported were unwanted. Clearly, it would have been better to ask participants if they had obtained an erection or ejaculated *even though you did not want this to happen*. Thus, it is not known if all men who reported such responses were upset by them. It is known, however, that genital responses are not uncommon in anxiety states in males. For example, Kinsey, Pomeroy, and Martin (1948) report that, '... the physiologic mechanism of any emotional response (anger, fright, pain etc.) may be the mechanism of sexual response'. Further, Redmond, Kosten and Reiser (1983) provide a number of case examples of men who experienced ejaculation in a variety of anxiety provoking situations. As reported above, however, such 'sexual' responses can be the cause of much psychological distress in men who have experienced NVS (Mezey and King, 1989; Groth and Burgess, 1980).

Coercive behaviours of perpetrators

There were few differences between the rates of various coercive behaviours and perpetrator gender. In the GP sample women were more likely to use verbal behaviours (blackmail/shouting or screaming) than were male perpetrators. The use of blackmail/shouting/screaming by females may represent a subset of the higher rates of persuasion and verbal pressure as reported by women in Sorenson et al's (1987) study.

Rates of the victim being drugged by the perpetrator were low (as McGee et al (2002) found). This may change, however, as there is evidence for the increasing use of Drug Facilitated Sexual Assault (DFSA) against female victims (McGregor, Ericksen,

[7] Obviously, it should not be assumed that the presence of erection/ejaculation in MSM where a male perpetrator was involved indicates that any form of consenting activity with the perpetrator had taken place.

Ronald, Janssen, van Vliet and Schulzer, 2004) and it seems reasonable to assume there may have been since the data were collected, or will be, an increase in DFSA perpetrated against adult males.

Rates of weapon use (or threat with a weapon) by perpetrators were low in both samples. This contrasts with previous research that documents higher rates of weapon use (Mezey and King (1989; Lacey and Roberts, 1991; Hillman et al 1990; Isely and Gehrembeck-Shim (1997). Stermac et al (2004) also found higher rates of weapon use with weapons being used significantly more frequently by male perpetrators who were strangers than by male or female acquaintances. This discrepancy may be due to the fact that other studies have investigated weapon use in victims attending clinics/responding to research advertisements. It seems likely that such men may have experienced more serious forms of NVS.

Rates of the use of physical restraint were also low and much lower than that found by Kimerling et al (2002) and Stermac et al.(1996) Again, this is likely because men in these studies were attending clinics that specialise in treating victims of sexual assault.

This study did not inquire about NVS perpetrated while the victim was unconscious /sleeping (and this would have been useful) and there is evidence that men report NVS instigated while unconscious (i.e., sleeping, alcohol/drug intoxication: Isely and Gehrembeck-Shim, 1997; Stermac et al, 1996).

Victim's belief that his life was in danger

Rates of victims believing that their lives were in danger during the NVS experience were fairly low and did not differ significantly between men who reported NVS with a male or a female. Mezey and King (1989) reported much higher rates of a victim believing that they would be killed, while King and Woollett (1997) report that nearly a quarter of men feared for their lives during the assault (although this may have included some persons who experienced CSA rather than NVS in particular). As before, this is likely due to these researchers obtaining data from men who have experienced more severe forms of NVS.

Victim's behaviour during NVS

As hypothesised the rate of 'freezing' was more common where male perpetrators were involved (marginally significant association in the GP sample and three times higher with male than with female perpetrators in the GUM sample). Although it not possible to be entirely sure about findings from studies likely using different definitions of 'freezing' the rate of this response was higher (in victims of male perpetrators in the GP sample) than was found by Mezey and King (1989) but not Hodge and Canter (1997).

Thus, there is evidence that a large proportions of men experience 'freezing'. Future research could better distinguish between these two possibilities by assessing the 'freezing' response using the Tonic Immobility Scale – Adult Form (Forsyth, Marx, Fuse, Heidt and Gallup, 2000) which assesses various features of tonic immobility. Research on women has found that TI is significantly associated with penetrative CSA and is significantly (positively) correlated with depression, anxiety and PTSD symptomatology (Heidt, Marx and Forsyth (2005).

Sexual acts during NVS

Nearly one fifth of men in the GP sample who experienced NVS with a male reported being raped, and more than a quarter of men in the GUM sample who experienced NVS with a male reported being raped. The advantage of asking about 'rape' is that the likelihood that meaning of the term to both researcher and research participant is clear.

The rate of rape reported by men in this study is lower than that reported by men attending services for help after experiencing NVS that range from fifty (Stermac et al, 1996) to nearly ninety per cent (Hillman et al, 1990), but higher than that found by McGee et al (2002) as no man in their study reported being raped. This is likely due to differences in sampling as discussed above. Only one man reported being made to perform insertive anal intercourse of a male perpetrator. This was reported in 7% of cases in Isely and Gehrembeck-Shim's (1997) sample, however.

Rates of being forced to give oral sex are difficult to compare because other studies have only included forced fellatio (e.g., Isely and Gehrembeck-Shim (1997). The rate of orogenital contact was much greater than that found in McGee et al's study, (only three men) however.

The rate of insertion of objects into the victim's anus by male perpetrators in the GUM sample was greater than that reported in studies of men attending specialist services (Isely and Gehrembeck-Shim, 1997; Stermac et al, 2004 King and Woollet, 1997). Again, this is likely due to differences in sampling as men attending clinics are more likely to have experienced more severe forms of NVS.

High rates of intercourse with females were reported in both samples, and these rates were somewhat higher than those found by the re-analysis of Sorenson et al's (1989) data (Struckman-Johnson, 1991) McGee et al (2002) did not inquire about this form of NVS. The rates of forced sexual intercourse with a female were much higher than that in Isely and Gehrembeck-Shim's (1997) sample. These data perhaps suggest (at least) three possibilities:

1. That the definition of NVS employed in this research included unwanted sexual experiences (including intercourse) with women that men did not find distressing (the two examples provided in section above are consistent with this possibility, as are the data from Struckman-Johnson, 1988; and Krahe et al, 2003).

2. That perhaps only a very small proportion of NVS with a female that involves intercourse is highly distressing in nature and prompts help-seeking from specialist agencies (hence the low rate of men attending specialist clinics for help after experiencing NVS in Isely and Gehrembeck-Shim's (1997) study.

3. Men who experience NVS with a female are less likely to go for help due to feelings of shame or embarrassment. This possibility is likely inconsistent with data from McGee et al (2002) and the data of Struckman-Johnson (1988) and Krahe et al (2003), however.

It would clearly have been helpful to have included a question about the degree of distress experienced at the time of experiencing NVS as this would have afforded an understanding of the proportion of NVS experiences with females that involved intercourse and were experienced as distressing.

Injuries/STD's obtained during NVS

The majority of men who experienced NVS did not obtain an STD or any of the types of injury listed. No man in the GP sample reported an STD, while the rates of STD acquisition did not differ between men and women in the GUM sample (although numbers were small). There is only a small amount of data on STD in male victims of NVS, but rates in this study are lower than in Hillman et al's (1991) study which found evidence high rates of men seeking medical help regarding STD's after experiencing NVS.

One in four men in the GUM sample, and approximately one in six men in the GP sample reported some form of injury obtained during NVS. The rates were lower than those reported in studies of victims of NVS (e.g., Hillman et al, 1990).

It seems likely then that the higher rates of STDs and injuries observed in clinic samples are due to the fact that men attend these places after experiencing more severe forms of NVS.

Medical help-seeking

Overall, few victims went for medical help after experiencing NVS. This is not surprising since few men reported injuries. The time between experiencing NVS and presenting for medical help varied from within twelve hours to longer than a month. Conversely, it appears that the victims in Stermac et al's (1996; 2004) research attended the clinic within a short time of experiencing NVS (with mean times for victims of male and female perpetrated NVS being less than 24 hours). Stermac et al's (1996; 2004) data are, however, from a specialist Sexual Assault Care Centres and are unlikely to be representative of victims in general, however.

The data from this study are consistent with previous British research that demonstrates that male victims of NVS may not present immediately even after experiencing severe assaults. For example, Hillman et al (1990) report that one man did not attend for help until three weeks after being raped by three men, and even then only did so after being referred by a psychiatrist after an episode of DSH.

Rates of the likelihood of reporting experiencing NVS to the GP did not differ greatly according to perpetrator gender. The data indicate, however, that a sizeable proportion

of men would not report these experiences to their GP if asked directly. This could be due to a number of reasons including a discrepancy between the definition of NVS as construed by this research and by men responding to the question (i.e., men may not have said that they would report it because they do not believe that they experienced it, irrespective of what the interview questions imply). This could be the reason that a sizeable proportion of men indicated that the reason they did not go for help after experiencing NVS was because they 'Did not think it was a medical thing'. Contrary to these findings, McGee et al (2002) found that the majority of people (men and women) felt they would go to their doctor *if they experienced abuse.* Of course, it is not known if these people actually would go for help, however. Lack of trust, fears about confidentiality, and fear of medical insensitivity were given by those who did not think that they would tell a doctor about experiencing sexual abuse.

Further reasons endorsed for not going for medical help include being too embarrassed (nearly a third of men who experienced NVS with a male in the GP sample). A small proportion of men who experienced NVS with a male also reported fearing that their doctor might think that they are gay, or that a doctor would think that it was the victim's fault. This is perhaps not surprising since victims who have reported their NVS experience have reported negative responses. For example, one man in Mezey and King's (1989) sample reported that on disclosure of his rape to a psychiatrist he was ' ... politely disbelieved and urged to come to terms with the homosexual side of himself' (reported in King, 1992). Further, a victim of rape by five men who attended an Emergency Room subsequent to his assault reported that:

> *'A female resident came in ... asked what happened ... asked me if the [man] I was with was my lover. She barely looked at my cuts. She didn't examine me. She didn't do a rape kit. She didn't test me for any venereal diseases ... She gave me a cloth to wash off my hands ... She told me to be more careful nest time and sent me home. I think her comment 'Be more careful next time' was how she interpreted gay sex. She had this attitude of ' ... they all get rough, They're always doing something up the butt'. Even if she had meant 'be careful where you walk' or something like that ... it would still have been an instance of blaming the victim and a lack of sensitivity about male rape'*

It is also possible that those who believed that they had experienced NVS did not disclose the experience because they wished to forget about it as Petrak et al (1995) found with more than half of male and female victims of NVS.

Few men got help from non-medical agencies. This may be due to the reasons outlined above (i.e., did not believe that they were a victim of NVS, or that it was not serious, or concerns about the reactions of others to such disclosure). Indeed, there is some anecdotal evidence that men who report to specialist (non-medical) agencies may not receive appropriate responses. For example, one man who rang a rape crisis centre after being raped was told 'Honey, we don't do men' (Donnelly and Kenyon, 1996). Thus, victim's reluctance to contact helping agencies may be based upon a (possibly) accurate perception of an unhelpful response. Indeed it has been argued of female victims that:

> *' ... for a rape victim to receive desired services their cases may need to fit a rather constricted mold. When certain characteristics of the victim, the assault, and the community are in careful alignment, the likelihood of an outcome that is consistent with victims' needs is most probable. As these factors deviate from this narrow path, the number of services may drop off, the fit with the victims' wishes may be compromised, and the advocacy need to bring about beneficial outcomes may rise (Campbell, 1998).*

It seems obvious that this will apply to male victims also, and there is some anecdotal evidence that this may require proper staff training. For example, Walker et al (2005) report that men in their sample who had received psychological treatment reported that while the attitudes of therapists were helpful, *' ... they also felt that the professionals lacked the expertise to deal with male sexual assault issues'*

Disclosure of NVS

The majority of men in both samples had disclosed their experience of NVS within two weeks and subsequently. Obviously, these data are discrepant with other research (e.g., McGee et al, 2002). This may be due to different definitions employed and perceptions of what is abusive. For example the man who reported that his girlfriend would come home late and make him engage in sex said that he had told his friends about it and that they had had a bit of a laugh about it. Thus, a person may not disclose NVS because it

is too trivial (see McGee et al, 2002), disclose it because it *is* seen as trivial/non-problematic. Disclosure of NVS is, then, a complex matter and the reasons for disclosure and non-disclosure should not necessarily be construed as an experience being too difficult to talk about. Disclosure rates did not differ according to gender of NVS perpetrator. Friends were the most frequent category of person to which NVS was disclosed either within two weeks or subsequently. This may be because men may find it easier to disclose such experiences to their friends and this may be particularly true for MSM whose family may not be fully cognisant of their sexuality.

Reporting to the police and legal processes

It seems reasonable to conclude that some of the NVS incidents reported in this research would likely not be considered a sexual crime by the men reporting them as this appears to be true of other studies on female victims (see, for example, Percy and Mayhew, 1997). Indeed, McGee et al's (2002) data suggest that men do not report NVS as it is 'too trivial' (note also that most men in Mc Gee et al's study reported no adverse effects from these sexual experiences)Thus, it is perhaps not surprising that rates of reporting to the police were low. The fact that the category 'other' reason was the most commonly endorsed reason for not reporting to the police is, perhaps, consistent with men not considering their NVS experience a sexual crime (or even that it was 'technically' a sexual crime, but one which was 'too minor' to report as seems likely from the data of McGee et al) Note that more than a third of men in the GP sample who reported NVS with a male endorsed the item that they were too embarrassed to report to the police. This may be consistent with difficulties in reporting NVS due to concerns about 'a lack of ability to defend the self', or concerns about disclosing 'homosexual' experience. Note, however, that being too embarrassed to tell the police does not mean that participants believe that they were a victim of a sexual crime and that the police should have been informed. Rather, participants may have thought that they would be too embarrassed to report, say, a 'minor' experience to the police. Note further, that a similar situation may obtain for reports of not wanting to get the person into trouble. Approximately one fifth of men who experienced NVS with a male or a female endorsed this item and it is possible that these men had experiences which they thought could have been illegal, but which they did not think justified police involvement. Alternatively, they may have thought that the experience was not illegal and therefore not reported it and thus not (potentially) get the person into trouble.

The two men who did report their NVS experience to the police found them helpful and a conviction was obtained in one of these cases. These numbers are obviously very small and it is difficult to compare findings with other studies, but these data do show that men *do* (at least sometimes) experience fair treatment from the police. These data are obviously not consistent with previous research (e.g., Walker et al, 2005). Again, this could be partially due to men who have experienced serious NVS and poor treatment from the police to be more likely to respond to calls for research on male rape.

It clearly would have been helpful to establish the proportion of men who experienced NVS and also believed that they had experienced a sexual crime. The proportion of men not reporting to the police would then give a more accurate picture of those who consider themselves a victim of a crime, but do not report to the police.

It would obviously be helpful to obtain data from men who reported NVS to the police and to learn more about what prompted them to report the experience and also to learn more about their experience of interacting with the police. Such information could be very useful for the training of police officers.

Sexual experiences reported before age 16

Experiences in childhood are considered only briefly as they were not the main focus of the study (with the data primarily being collected to investigate revictimisation). The basis for this section is a comparison with data from this study with data from a review of 166 studies of 149 samples of research on male victims of CSA (Holmes and Slap, 1998).

CSA

Age at first CSA experience

CSA perpetrated by a male first occurred at a significantly younger age with a male perpetrator than with a female perpetrator. These ages were similar to the mean (9.8) and median age (10) of first experience of CSA based on a review of 149 samples (Holmes and Slap, 1998: the data are also somewhat consistent with those of McGee et al (2002)). The age of first experiencing CSA was significantly older with a female perpetrator in both samples. These data demonstrate the benefit of reporting ages separately according to perpetrator gender. The reason for the significant differences in

age according to perpetrator gender is not clear, although it may be due to male perpetrators preferring younger victims.

Frequency and duration of CSA experiences

Most men in the GP sample reported only one experience of CSA, while the majority of men in the GUM sample reported more than one experience of CSA. The data are consistent with those reported by McGee et al (2002) and Holmes and Slap (1998) whose review found that the rate of single incident CSA varied from 46% to 93%. The data from the GUM and GP samples are toward the bottom of this range. The majority of men who reported more than one experience of CSA reported that it occurred for less than one year (these data are consistent with those of McGee et al (2002).. However, substantial proportions of men reported abuse lasting for more than one year and this is consistent with previous research which demonstrates that males report CSA lasting for up to four (Holmes and Slap, 1998) or more (McGee et al, 2002) years.

Perpetrator gender and characteristics of CSA

The majority of perpetrators of reported CSA were male in both the GUM and the GP samples. This is consistent with Holmes and Slap's (1998) review that found between 53-94% of perpetrators of CSA are male. Unlike Balsam et al (2005), this research (neither GP nor GUM sample) did not find that MSM were more likely to report CSA perpetrated by a male. This could be due to differences in the definition of CSA or in the samples and sample sizes (Balsam et al (2005) had a much higher proportion of MSM in their research and numbers of MSM were small in this sample, perhaps leading to a Type II error).

CSA perpetrated by a relative was more commonly reported in the GUM than in the GP sample. The rate of familial abuse in the GUM sample is greater than that typically found in large-sample ($n > 1000$) studies of CSA (11-46%: see Holes and Slap, 1998). In the GP sample a large proportion of male perpetrators of CSA were strangers (24%), a much higher rate than that reported in small-scale studies (Holmes and Slap, 1998).

The majority of men did not obtain an erection or ejaculate during CSA (with men in the GUM sample who experienced CSA with a female being the exception – although numbers were very small). Nonetheless, a sizeable proportion of men who experience CSA do report genital responses. As discussed above such responses may be

involuntary, but still may be a source of shame or confusion about sexuality. No other study of CSA included obtaining information about genital responses in victims making comparisons between studies impossible.

Rates of verbal coercion were high in both samples (and higher than that reported by McGee et al, 2002). . The rate of various physically abusive strategies was broadly consistent with the rates of physical force reported by Holmes and Slap (1998: 10-25%). Female perpetrators were no less likely to use physical coercion than were male perpetrators. Only victims of male perpetrators reported being threatened with, or hurt by, a perpetrator with a weapon, however.

Genital touching by the perpetrator was the most commonly reported CSA experience. More men in the GUM sample reported being raped than did men in the GP sample. The data suggest that approximately 1 in 300 men of men in the GP sample report being raped as a child. This rate was much lower than research reviewed by Holmes and Slap (1998) and was lower than the rate of CSA involving intercourse reported by Dube et al (2005: although their definition likely included 'assenting' sexual experiences).

Hand-genital contact was the most common sexual behaviour with both male and female perpetrators. .The rates of fellatio performed by the perpetrator and by the victim were lower in the GP sample than rates reported by Holmes and Slap (1998). The rates of these experiences in the GUM clinic were toward the top of the range of reporting of these experiences in other studies, however (Holmes and Slap, 1998).

As with other studies (see Holmes and Slap, 1998), the majority of men had not disclosed their experience of CSA (although McGee et found that the majority of men had disclosed CSA). Disclosure of CSA did not differ greatly according to perpetrator gender. Previous research has found that reasons for non-disclosure include a desire to forget the experience, not wishing to get the perpetrator into trouble and concern about reactions to disclosure (Holmes and Slap, 1998). As stated above for NVS experiences, disclosure is a complex matter and will likely depend greatly on the definitions of CSA employed by researcher and participant and also, perhaps, by the degree to which the experience was perceived as harmful.

While there is evidence, then, that spontaneous rates of disclosure are low, there is also evidence that rates of reporting may be affected by the behaviour of clinicians. For example, when protocols for inquiry about CSA are instigated the rate at which these experiences are reported increases (Holmes and Slap, 1998). Thus, there is evidence that, despite various psychological (e.g., shame) and practical (e.g., possibility of family break-up) impediments to disclosure clinicians may be able to elicit disclosure via sensitive inquiry into these experiences. Note that the rate of disclosure of CSA in research is also affected by the behaviour (choice of survey mode) of researchers. For example, a computerised interview has been found to perhaps increase the rate of reporting of experiencing CSA in male students (Bagley and Genuis, 1991).

Consistent with studies reviewed by Holmes and Slap (1998) few men reported experiencing CSA to the police. Note that even when men do report CSA to the police there is evidence that prosecution is less likely than in cases of sexual abuse of females (see Holmes and Slap, 1998).

Assenting sexual experiences

No previous large scale study has inquired about ASE as described in this research. As such, it is difficult to compare findings with other studies. ASEs were reported by more than one in four men in the GUM sample, and nearly one in twelve men in the GP sample. Both of these rates are higher than the rate of CSA reported in the GP and GUM samples. These experiences were more common in men who reported male sexual partners in the GP sample (but not in the GUM sample). The reporting of male sexual partners was significantly associated with reporting of male perpetrator of ASE in both samples, and, as such, the data are consistent with the findings of Balsam et al (2005). This should not be taken as evidence that these experiences necessarily 'cause' men to become gay/bisexual, as it has been argued that '... gay or bisexual identity may precede abuse' and that ' ... males exploring their sexual identity may do so in venues ... where abuse may happen more frequently' (Holmes and Slap, 1998).

The two most obvious differences between ASE and CSA experiences are the age at which they occurred and the gender of the perpetrator. First, the age at which ASE first occurred was virtually identical in both samples and between two and four years (depending on perpetrator gender and sample) greater than that of CSA experiences. It seems likely that these age differences reflect large differences in the physical and

psychological maturity of men reporting them. Second, the majority of older persons in both samples were female. In fact, overall (data from CSA and ASE combined) women were involved in more illegal sexual acts with under-age boys than were men. This was true in both samples, and is clearly contrary to previous research which has found a preponderance of male perpetrators (Holmes and Slap, 1998). The data, then, clearly demonstrate the important of inquiring both about perpetrator gender and about the nature ('wanted' / unwanted) of boys' sexual experiences before age sixteen.

Rates of reporting of sexual experiences with relatives were also lower in ASE than in CSA. Thus, ASE experiences differ from CSA experiences in the reduced likelihood of breaking the 'taboos' of sex with relations and sexual contact with a male (Fromuth and Burkhart, 1987). Sexual intercourse with a female was the most frequent experience with an older female in both samples.

Men in both samples reported high rates of sexual intercourse with female perpetrators, and nearly on in ten men who reported ASE with a male in the GP sample reported being anally penetrated by a male (the rate in the GUM sample being some three and a half times greater). Thus, there is evidence that ASE's include 'serious' forms of abuse of under-age men.

Research on subjective ratings of ASE's before sixteen are somewhat contradictory. For example, the finding that ASEs occurred at a later age and were more likely to occur with females is consistent with previous research on ratings of subjective experiences of sexual contact before age 16. Fromuth and Burkhart (1987) report that experiences at an older age (i.e., >=13 vs. < 13) before sixteen were significantly associated with the report of the event having had a positive effect on the participant's life. Thus, it appears that ASE's may be construed by those experiencing them as an 'introduction to sexual prowess and manhood' as Bolton et al (1989) suggest

Wellings et al (2001: British sample) and Dickson, Paul, Herbison and Silva (1998: New Zealand sample) present data on feelings about first experience of consensual heterosexual sexual intercourse and the relative willingness of both the parties. Wellings et al report that 42% males aged 14 and 26% of those aged 15 at the time of such intercourse reported wishing that they had waited longer before the experience. In New Zealand 23% of those aged 13 or younger and 16% of 14-15 year olds at the time

of such intercourse reported that they 'should have waited longer' before the experience (Dickson et al, 1998).. These data are a reminder that although men (by definition) in this research reported that they wanted their ASE experience it cannot be assumed that retrospectively they do not feel that they should have 'waited longer'.

The findings of Wellings et al (2001) and Dickson et al (1998) are not necessarily contradictory to those of Fromuth and Burkhart (1987). For example, the fact that an experience is labelled positive on one's life does not mean that it may not be regretted. One belief may represent a 'practical', and another belief a moral, judgement. For example, a man could perceive an ASE as positive in that he 'learned' about sex (and gain approval from society, Bolton et al, 1989), but still wish that he had experienced it later in life (e.g., by wishing that he had 'saved himself' for another partner). Note also that an ASE may be construed as positive in that it afforded relief from peer pressure to achieve a 'sexual milestone'. In such a way, the positive effect of the ASE could (in behavioural terms) represent both a reward, and escape from peer pressure (negative reinforcement). Further, ratings of an event having a positive effect on life (or having regret about an experience) are obviously vague with regard the true nature, intensity and duration of the belief (and presumably any associated affect and behaviour) regarding the experience.

Mental health problems, sexuality concerns and help seeking

The findings related to mental health problems experienced after age sixteen, or where age of onset was not unspecified, and help-seeking for same are considered first, followed by sexuality concerns, with psychological disturbance experienced (and help-seeking for same) before age sixteen considered last. As with previous sections, primacy is given to the results regarding NVS.

It is important to note that comparisons between findings from this study and those reported in the introduction are difficult, if not practically impossible, since other community studies:

- Inquired separately about drug and/or alcohol problems (Plant et al, 2004), but these difficulties were conflated here
- Used a measure of difficulties associated with traumatic stress (the TSI: see Elliott et al, 2004) the findings of which are difficult to compare with the

categories used here (for example, the TSI inquires separately about depression and anxiety, but these were combined with other variables into the category 'psychological disturbance' in this study)

- Used either formal diagnostic criteria to diagnose mental health problems (Burnam et al, 1988), or self-report queries about a variety of difficulties (Siegel et al, 1990) in those with a *lifetime* history of abusive sexual experiences
- Did not inquire about self-harm

It is also difficult to compare findings from research on small samples of men who have attended clinics/agencies for help or responded to press advertisements for participants in research on sexual assault of men as these studies did not use variables that could easily 'map onto' the mental health categories used here.

Mental health problems experienced after sixteen (or age of onset unspecified) and help seeking

Univariable analyses

Mental health problems before and after experiencing NVS

Analyses did not find significant differences in the prevalence of the mental health problem categories psychological disturbance, drug problem or 'any problem' before and after experiencing NVS with some rates decreasing after NVS. The rate of the category 'sexual problem' was higher both before and after NVS than in those not reporting a sexually abusive experience.

The rates of psychological disturbance in men both before and after experiencing NVS were *lower* than in men not reporting any abusive sexual experiences. Likewise, the rate of 'any problem' was also *lower* both before and after experiencing NVS than it was in men who did not report any sexually abusive experiences. These findings were unexpected, but could be due to a number of reasons:

1. Some men who reported NVS terminated the interview (or did not return to complete the interview after seeing their GP or GUM staff). The results may have been different if these men had completed the interview.

2. The NVS category included men who reported NVS with men and women and previous research (Krahe et al, 2003; Struckman-Johnson, 1998) has shown that less than 50% of men who report non-consensual sexual contact with women report that the experience was distressing. The proportion of men who report male sexual partners and also report non-consensual sex with men who rate the experience as not distressing is unknown at this time. Further, McGee et al (2002) found that 78% of their participants (both male and female) reported that their experience of NVS affected their life 'overall' either 'not at all' or 'a little'. Although it is possible that participants in McGee et al's (2002) study may have used different definitions of 'affected their life', there seems good evidence that, at least subjectively, the majority of NVS victims do not report even moderate amounts of distress associated with NVS[8]. It is possible, of course, that victims are unaware of some of the effects of abusive experiences on their lives, however (McGee et al, 2002).

3. Men who reported NVS might have found it difficult to acknowledge experiencing mental health problems associated with the experience (i.e., wanted to appear unaffected by the experience). A shame attenuation/ normalising question[9] (see Othmer and Othmer (2002) for principles of wording such questions) about the experience of symptoms in men who had experienced NVS could be worded as follows 'It is known that it is common for men who have experienced [sexually abusive experience] with either men or women (or both) to report having a variety of different troubles. Have you ever ....?' Of course, this would then require that those not reporting any sexually abusive experiences, who could be asked 'Much research shows that it is common for men to report having a variety of troubles. Have you ever ...?'.

4. It seems likely that the definition of NVS may have led to the inclusion of 'relatively minor' incidents which participants may not have experienced as

[8] This is affected by the nature of lifetime experience of sexual abuse, however, with nearly 40% of those who report a lifetime experience of penetrative abuse reporting that it had affected their life 'a lot' or 'extremely'.

[9] Catania et al (1996) did not find that queries in the 'enhanced' interview condition increased the rate of reporting of sexual problems, but it could be argued that their enhanced condition was inadequately shame/embarrassment reducing and did not 'normalise' the (possible) consequences of a sexually abusive experience(s).

distressing (see section on construct validity above), and men may have wanted to demonstrate that they were not affected by them.

5. The interview inquired only about the *presence* of mental health problems, and not their *severity*. The severity of mental health problems in those who reported them both before and after experiencing NVS could have increased after NVS.

6. A larger sample of men who had experienced NVS would have led to greater power in detecting associations between NVS (and other sexually abusive experiences) and mental health problems and help seeking.

7. Elliott et al (2004) found a significant negative association between current reported symptomatology and time between experiencing NVS and research participation. It is perhaps possible that men who experienced NVS a long time previously may have had difficulty recalling whether they had experienced 'troubles' at a previous time (perhaps especially if no longer experiencing these symptoms).

8. Some men reported mental health problems before NVS and not subsequently (and vice versa). There are many reasons why this could be the case. For example, a man who was unsure about his sexuality may have experienced 'psychological disturbance', associated with this. After experiencing NVS he may subsequently decide that same-sex contact is not what he desires and hence feel less unsure about his sexual identity and experience less 'psychological disturbance'. Clearly, many other hypothetical examples could be created.

9. It is unknown if rates of deliberate self-harm or the category substance misuse (which included both a 'drug problem' and alcohol misuse) increased after experiencing NVS (as questions about deliberate self-harm and alcohol use did not specify the age of onset of these difficulties). Clearly, it would have been helpful to know about this. In fact, research shows that while drug and alcohol dependence are significantly more common after these experiences they are also significantly more common in victims *before* they have these sexually abusive experiences (with the same being true of phobias and depression: Burnam et al, 1989). Thus, it is clear that some disorders may precede sexually abusive

experiences and may even play a role in their occurrence (e.g., a person under the influence of drugs and/or alcohol may be more vulnerable to sexual assault. The findings of Tewksbury and Mustaine (2001) are perhaps consistent with this possibility.).

Help seeking before and after experiencing NVS

The numbers of men who went for help regarding mental health problems experienced before/after NVS were small, although no significant change in the proportions of those seeking help was found. This finding could be due to some of the reasons discussed above (e.g., if a man did not wish to be seen to be affected by his experience/it was an experience of only 'minor' NVS he would not have reported a mental health problem and this would not have prompted inquiry about help-seeking).

Linear trend analyses

Significant linear trends were found for the reporting of all mental health problem categories. These findings supported the proposed hierarchy of abusive sexual experiences (based on the research of Follete et al , 1996 and Dube et al, 2005) described in the method section. In nearly all categories of mental health problems, the prevalence of the mental health problem was greater in the next highest level of the hierarchy of sexually abusive experience.

Note, however, that, the rates of psychological disturbance and sexual problems are now higher in those reporting NVS than in those not reporting sexually abusive experiences (unlike comparisons before and after NVS). This is due to the fact that some men reported these experiences before, but not after, (and vice versa) experiencing NVS (but responses were conflated for the linear trend and crude odds ratio analyses). Note also that the rate of the category any problem was greatly increased from analyses comparing rates of mental health problems before and after NVS as it included data from a wider range of mental health problems (i.e., substance misuse included drug *and* alcohol problems and deliberate self-harm). It is clear, however, that the data for psychological disturbance discussed above demonstrate that the increased rates of mental health problems at each level of severity of sexually abusive experiences do not mean that these problems necessarily *followed* the sexually abusive experience.

The only significant linear trend for help seeking was for the reporting of help-received from a mental health worker. It may be that many men who saw a mental health professional would have been referred by their GP, but that they may not have construed the referral as help (i.e., considering only therapy from mental health workers as 'help').

Associations between abusive sexual experiences and mental health problems and help seeking

The crude (i.e., not adjusted for confounders) odds ratios were significant for all categories of mental health problems for those reporting NVS except 'psychological disturbance'. The crude odd ratios for the two CSA categories were significant for all mental health categories. For ASEs the crude odds were significant for substance use and self-harm (with sexual problems being marginally significant). Again, these findings seem to lend support to the proposed hierarchy of sexually abusive experiences as the two CSA experiences were significantly associated with all problems (with the odds ratios for CSA involving intercourse and/or orogenital contact being larger in four of five categories than those for CSA not involving intercourse or orogenital contact), while NVS was significantly associated with four mental health categories and ASE significantly associated with two mental health categories (and marginally significantly associated with a third). Thus, on a simple measure of severity (i.e. 'density' of mental health problems), there was support for the proposed hierarchy of sexually abusive experiences (although the proper interpretation of these data is that mental health problems are more common as severity of sexually abusive history increases and not necessarily that they are consequences of these experiences (although they *may/likely* contribute to them)).

NVS was marginally significantly associated with help from a mental health worker and significantly associated with help from the category 'other' (i.e., nurse/social worker/'somebody else'). Note that the category 'other' could have included Health Advisors (who were employed in the GUM clinic) and other 'informal' sources of help (possibly even friends). These data suggest that men who report these experiences may either have more severe mental health problems, or be more likely to seek help for problems of similar severity to those not reporting these experiences. There was a significant negative association between reporting NVS and help from a doctor. The conflated CSA variable was also significantly associated with help from a mental

health worker. This is perhaps not surprising since the data show that CSA (especially that including intercourse and/or orogenital contact) is strongly associated with mental health problems.

Multivariable analyses

Mental health problems

After controlling for confounders, NVS was only a marginally significant predictor of self-harm ($p = 0.05$). The rate of deliberate self harm in men who reported NVS was nearly three times that of men who did not report any of the sexually abusive experiences, although it was much lower than the rates of deliberate self-harm (50%) and suicide attempts (48%) in Walker et al's (2005) sample of male rape victims. It seems likely that this variable represents the behavioural manifestation of various psychological problems (although NVS was not a significant predictor of any of the other mental health categories). The lack of NVS as a predictor of mental health problems could be due to a number of factors (as outlined above) and possibly also due to the samples used in the research. As previously stated, it seems likely that the prevalence of mental health problems in men attending their GP/GUM clinic is greater than in the general population. As such, the effect of the site of the inquiries may have led to a difficulty in discriminating between rates of mental health problems and help seeking in those who had/had not experienced NVS. Essentially, it seems likely that the overall *prevalence* of mental health problems would have been lower if men had been recruited, say, from the GPs *list* (e.g., by contacting these men and interviewing them at home or by telephone – an example, perhaps, of conditioning on the antecedent) rather than from the GP's *surgery* (an example, perhaps, of conditioning on the consequent). Recruiting from the list could have led to a larger association between NVS (and other sexually abusive experiences) and mental health problems and help seeking.

Consistent with previous research on CSA involving/not involving intercourse (Dube et al, 2005), CSA involving sexual intercourse and/or orogenital contact was a significant predictor of all categories of mental health problems and the odds ratios for these experiences were larger (for three of the five categories of mental health problems) than those for CSA not involving intercourse or orogenital contact. Unlike CSA involving intercourse or orogenital contact, the odds ratios for sexual problems and self-harm for CSA not involving intercourse or orogenital contact, *increased* after controlling for

potential confounders. The reason for this is not clear. It is clear, however, that the multivariable analyses did not control for a number of potential confounders that may have affected the results (see point 1 below).

Assenting sexual experiences were significant predictors of deliberate self-harm. These findings are not consistent with those of Rind et al (1998) that question the harmful effects of child sexual abuse on men. Further, these experiences may have forensic implications as it is clear that perpetrators are modelling illegal sexual behaviour to young people when they engage in sex with males under the legal age of consent. Thus, it is possible that men who have experienced ASE may be more likely to engage in such behaviour with younger people in the future.

The significant relationships between the reported sexual experiences and mental health are (at least partially/qualitatively) consistent with previous research on the effects of NVS and CSA. These findings need to be interpreted with caution for a number of reasons, however:

1. As stated above, it seems likely that affirmative responses to the NVS inquiry encompass a broad range of experiences, some of which are (perhaps) unlikely to affect mental health.

2. It is unlikely that the mental health problem categories used in this study would be equivalent to recognised diagnostic entities. This is obviously particularly true of the category 'psychological disturbance' that was created by conflating responses to queries about a variety of mental health problems. Further, the category substance misuse was created by combining CAGE questionnaire responses and a query about a 'drug' problem and it is not clear that those 'positive' on this conflated variable would receive a formal diagnosis of substance abuse. Likewise, it is not clear that affirmative responding to the item 'sexual problem' would be equivalent to meeting a formal diagnosis of sexual dysfunction. Finally, it is obvious that the deliberate self-harm category cannot map onto a diagnostic entity (sine none exists, although deliberate self-harm is a diagnostic feature of Borderline Personality Disorder, which is strongly associated with a history of child sexual abuse (American Psychiatric Association, 1994)).

3. Questions about mental health problems inquired only about the *presence* of mental health problems. The chronicity of the mental health problems is unknown (apart from the fact that they lasted for more than two weeks). Persons who reported sexual experiences may or may not have experienced mental health problems for longer than those not reporting sexual experiences. Similarly, the number of episodes of mental health problems may or may not have been higher in those reporting abusive sexual experiences. For example, research has shown that patients with bipolar disorder who reported sexual and/or physical abuse in childhood had an earlier onset of Bipolar Disorder and faster cycling frequencies (Leverich, McElroy, Suppes, Keck, Denicoff-Kerk, Nolen-Willem, Altshuler, Rush, Kupka, Frye, Autio and Post, 2002).

4. The *severity* of reported mental health problems is unknown. For example, participants were asked about different types of self-harm including cutting. This could vary from superficial scratches to life-threatening wounds requiring vascular surgery. Thus, it is possible that those who reported sexually abusive experiences may have had higher levels of depression, anxiety etc.

5. Item wording may have inhibited reporting due to 'implied dysfunction' (and the participant not wishing to be seen as having such a problem) or discordance between the opinion of the researcher and the participant as to what constitutes a 'problem'. For example, participants were queried about whether they felt they had 'a drug problem'. It may have been more useful to inquire about the use of certain types of drugs (and injection drug use in particular) as this question may have resulted in reduced reporting due to the potentially shame inducing nature of the word 'problem' (although an affirmative response does indicate that the participant is troubled by the behaviour/experience[10]). Providing a list of problems would also likely have improved recall about drug use. Note that a similar criticism applied to the inquiry about a 'sexual problem'. A list of sexual difficulties (e.g., erectile dysfunction, avoidance of sexual contact, inability to orgasm) would likely have facilitated both reporting and recall of such difficulties. Inquiries about use of particular drugs or

[10] It is accepted, of course, that such a judgement may be based on different criteria by different persons and this is obviously a difficulty in asking questions which require such judgements.

particular sexual difficulties would have increased the number of questions and the length of the interview, however.

6. It is known that there is considerable overlap between CSA and other forms of childhood abuse in British men (May-Chahal and Cawson, 2005). Thus, the observed psychopathology in men who reported sexually abusive experiences is likely attributable only in part to the sexually experiences in childhood that were reported in this study.

7. Significant relationships between the reported sexual experiences and mental health problems did not take into account distress caused by any violent aspects of the sexual experience (since numbers were too small to afford such an analysis). Research (Bulik, Prescott and Kendler, 2001) has shown, however, that force or threat during CSA is significantly with anxiety (in multivariable analyses of data from female twins controlling for a variety of aspects of sexually abusive incidents) Thus, it may be that the violence involved, rather than the sexual contact itself, is responsible/more responsible for mental health problems.

8. The data show that mental health problems are not necessarily a direct consequence of NVS. The data showed that reporting of certain mental health problems actually decreased (though not significantly) after experiencing NVS. Conversely, participants could have been involved in traumatic experiences (e.g., a car crash) after experiencing NVS. Research demonstrates that 'overlap' between traumatic experiences in population samples is common (e.g., Breslau et al 1991).

9. Distress may even be increased by contact with potential sources of help and may not be entirely attributable to the sexually abusive experience. For example, Campbell, Sefl, Barnes, Ahrens, Wasco and Zaragoza-Diesfeld (1999) report that PTSD symptoms were significantly elevated in a sample of women who were raped by a known person, received minimal help from legal and medical services and who experienced victim-blaming behaviour. Crucially, there is evidence that such 'secondary victimisation' is not something simply perceived by victims, it is also identified as problematic by rape advocates

(Campbell, 1998). Similarly, there is evidence (in females) that a negative reaction to disclosure of CSA is associated with significantly higher rates of various mental health problems in adulthood (Bulik, et al, 2001).

10. Previous research shows that being divorced/separated or widowed and urban residence are significant predictors of mental health problems (Jenkins, Bebbington, Bugrah, Farrell, Gill and Melzer, 1997). The reasons for not controlling for these potential confounders were outlined in the method section, although it seems clear that had this been possible the results could have been different. Obviously, this is also possibly true of the effect of interviewer, as this was not controlled in this study. The effect of other potential confounders could also have been addressed. For example, Jenkins et al also found that family type and involvement in employment were significant predictors of mental health problems. Further, Chang, Skinner, Zhou and Kazis (2003) found that men who reported a lifetime history of sexual assault had ' ... significantly lower levels of mental health status' than those not reporting sexual assault. Importantly, however, Chang et al (2003) found that mental health in sexual assault victims was significantly worse in those who did not attend religious services, and levels of depression significantly lower in sexual assault victims who rated themselves as religious. Further, the effect of social support was not assessed in this study and this has been found to affect psychological health in a large (n = 4003) sample of English men (Fuhrer and Stansfeld, 2002). Thus, controlling for a wider range of confounders could have affected the significance of the results obtained.
11. It is clear that only a small number of potential psychological problems experienced in childhood were controlled for in this study. Thus, it is possible that this confounder was not adequately controlled for in the multivariable analyses, and this could have also have affected the results obtained.

12. Although there is evidence that use of computer administered interviews increases reporting of sensitive behaviours (see the introduction), research has also found higher rates of reporting of feelings of hopelessness, worry and depression in the past 30 days in face to face compared with A-CASI interviews (Newman, Jarlais, Turner, Gribble, Cooley and Paone (2002). Research has also demonstrated that face to face interviews elicited higher rates of reporting of

mental health problems than did telephone interviews (Henson, Cannell and Roth, 1978). It is argued that higher rates of reporting may be associated with a "cry for help" (Dahlstrom, Welsh and Dalstrohm, 1972) or to elicit sympathy/social support (Hill, 1987). Thus, it is possible that the use of a computerised interview may have inhibited reporting and this could have affected the results. Obviously, it is not known if this may have differentially affected reporting of symptoms in those who did/did not report a sexually abusive experience.

This research did not inquire about the full range of difficulties experienced by men who report sexually abusive experiences. For example, the interview did not inquire about other recognised diagnostic entities that were more common after sexual assault (e.g., obsessive compulsive disorder, personality disorder: Burnam et al, 1988). Further, this research did not inquire about psychological difficulties not included in diagnostic manuals such as decreased self-esteem, problems in social relationships (in general), anger, increased sense of vulnerability, social isolation, fear of being perceived as Gay, anger/irritability, or feeling dishonoured or spoiled as has previous research (see the introduction). Also, this research did not inquire about other psychological/behavioural problems that are associated with sexually abusive experiences. For example, meta-analyses of health problems in persons with and without a history of sexual assault have found that persons with a history of sexual assault self-report poorer physical health (Golding, Cooper and George, 1997) and are twice as likely to be confined to bed for health problems and one and a half times more likely to experience days when activities were limited due to physical problems (Golding, 1996).

Finally, research also shows that a history of child sexual abuse in men is significantly associated with marrying an alcoholic, current marriage problems and current family problems after controlling for age, education, ethnicity, and other forms of adverse childhood experiences (Dube et al, 2005). Thus, there is evidence that adverse sexual experiences impact upon men in a wider variety of ways than was assessed for in this research. Thus, an absence of a finding here regarding a lack of relationship between a given sexual experience and a mental health outcome should not be taken as evidence for this experience not having an adverse effect on human health and behaviour

Confounders

Consistent with previous research finding elevated rates of psychological problems in MSM (e.g., Warner et al, 2004)), the reporting of male sexual partners was a significant predictor of psychological disturbance, the category 'any problem', and a marginally significant predictor of a sexual problem. Controlling for sexuality may be particularly important in research regarding sexually abusive experiences as men who reported male sexual partners were more likely to report both NVS and ASEs (although these findings are from univariable analyses only).

As expected GUM site was a significant predictor of all categories of mental health problems and this finding appears consistent with previous research which has demonstrated high rates of psychological problems in GUM patients (Osborn et al, 2002).

As expected psychological problems in childhood were significant predictors of all categories of mental health problems and this finding is consistent with research which demonstrates associations between psychological problems in childhood and adulthood (see Hersen and Last (1990) for a thorough review).

Younger men were significantly more likely to report substance misuse and deliberate self-harm. The finding regarding substance misuse is likely related to increased use of illicit substances in recent times. The finding regarding deliberate self-harm is consistent with the fact that being male and being young are both risk factors for suicide (DOH, 2002)

Non-manual occupational class was a significant negative predictor of substance misuse, while white ethnic background was a significant predictor of a sexual problem and substance misuse. Data regarding these demographic factors need to be interpreted with caution, however as this study included only a very small number of non-white men. Note also, that the ethnicity variable is somewhat 'blunt' in that, for example, it reveals nothing about different rates of psychological disorders in, say, black vs. Asian men.

It is, of course, obvious that any of the above confounders may not have been significant had other confounders also been controlled for in multivariable analyses (see later in this section of the thesis).

Help seeking for mental health problems

Univariable analyses

It is difficult to compare rates of help received for mental health problems due to the different definitions of sexual experiences, mental health problems and help received (e.g., Plant et al (2004) inquired about help received in the last twelve months only). The data show, however, that in this study smaller proportions of men who reported NVS received help than did men in Plant et al's study (2004) (37%). Perhaps the most likely explanation for this is that Plant et al (2004) inquired about help seeking separately to inquiring about symptoms (i.e., all men were asked about help-seeking and not just those 'positive' for a given symptom: the reader is reminded that in this study those who reported substance misuse and/or deliberate self-harm were not asked about help-seeking for these problems[11]). The rates of help seeking for mental health problems in this and Plant et al's (2004) study are, however, higher than the rate of use of mental health services in Golding et al's (1988) study (7%). This could be due to the fact that the definition of sexual assault on which the data were based likely included attempted NVS which is perhaps less likely associated with mental health problems (and, hence, help seeking).

The significant linear trend for receiving help from a mental health professional supported the hierarchy of severity of sexually abusive experiences (based on the research of Follete et al,1996; and Dube et al 2005) described in the introduction.

Multivariable analyses

After controlling for confounders, NVS was a marginally significant predictor of help received from a mental health worker (counsellor / therapist / psychologist / psychiatrist) and a significant predictor of help received from some 'other' source. It is clear of course, that the terms 'counsellor' and 'therapist' are broad and that some men may have seen persons who describe themselves as counsellors/therapists, but who are

[11] Actually, help-seeking in relationship to drug problems was inquired about, but not help-seeking in relationship to scoring >= 2 on the CAGE

not in possession of relevant qualifications or members of a recognised professional body. As stated above, these data suggest that men who have experienced NVS may experience more severe forms of psychopathology or be more likely to seek help for psychopathology of equal severity. After controlling for confounders, NVS was no longer significantly associated with being *less likely* to receive help from a doctor, suggesting that one, or more, of the confounders was responsible for the univariable finding. The finding that NVS was a significant predictor of help received for mental health problems from some 'other source' may be due to contact with Health Advisors, friends or agencies such as SURVIVORS. Whatever the case, the data show that men who have experienced NVS are more likely to use such other sources of help. While this may be positive, it could also be the case that use of mental health services could be greater in men who have experienced NVS as this help seeking from other sources may represent a reluctance to engage with psychiatric services despite the need for help.

The finding that CSA was only a marginally significant predictor of help from a mental health professional was somewhat surprising given the size of the odds ratios for psychological disturbance and a sexual problem. The data suggest the possibility that even those men who have experienced very severe forms of CSA may not get help for psychological problems experienced.

Assenting sexual experiences were not significant predictors of receiving help. This is perhaps not surprising as these experiences were only significant predictors of one form of mental health problem (deliberate self-harm) and no inquiries were made about help-seeking about these experiences.

Unlike the data for mental health problems, data from the multivariable analysis did not provide qualitative support for the hierarchy of severity of sexually abusive experiences.

Significance of confounders

Non-manual occupational class and psychological problems in childhood were significant predictors of help received from a mental health professional. The finding that psychological problems in childhood was a significant predictor of help received from a mental health professional is not surprising since these experiences were

significant predictors of a number of psychological difficulties in adulthood (see above). Younger men were significantly more likely to report receiving help from some 'other' source, while older men were significantly more likely to report help from a doctor and 'medical intervention'.

It is, of course, obvious that any of the above confounders may not have been significant had other confounders also been controlled for in multivariable analyses (see later in this section of the thesis).

For a number of reasons, the significant relationships between the reported sexual experiences (and confounders) and help-seeking need to be interpreted with caution, however:

1. It is important to recognise that controlling for other confounders may have affected the significant results obtained. For example, Golding et al (1988) found that a history of sexual assault was significantly associated with mental health service use after controlling for demographic factors, but that this relationship disappeared after controlling for history of psychiatric diagnosis[12], and rating of health and functional limitations. It is also possible, of course, that other variables could confound the relationship between mental health problems and help seeking such as religiosity and social support.

2. The CASI question did not inquire about help received for deliberate self-harm or alcohol problems and it could be that NVS or other abusive sexual experiences were stronger predictors of help received for these problems. It clearly would have been helpful to inquire about help received regarding these problems (although there is likely much overlap between these experiences and the mental health problems that did lead to inquiries about help-seeking) or to have asked a more general question about help received from a variety of sources after age sixteen.

3. The item asked about whether the person had tried to get help from a variety of sources and, as such, it is not clear if those reporting problems were actually helped (although the item wording did suggest this).

[12] Although mental health problems *in childhood* were controlled for in this study

Future research should attempt to ascertain if men who try to get help after sexually abusive experiences are satisfied with the help offered as research shows that 'help' offered can be inappropriate and/or result in more distress (Campbell et al 1999). Further research should also ascertain the degree to which the 'density' and/or severity of formal diagnostic entities predicts help seeking compared with other difficulties such as behavioural changes, anger, low self-esteem etc. Equally, the degree to which variables such as shame/embarrassment inhibit obtaining help could also be investigated (e.g., nearly one third of victims of NVS perpetrated by a male in the GP sample who had not told their GP said they had not told their GP about it because they were too embarrassed, see also the findings of Petrak et al (1995) and Huckle, 1995).

Sexuality concerns

There was a significant association between change in sexual orientation rating and male perpetrator of NVS. In most (13/14) cases, there was a move *away* from sexual fantasy about /sexual contact with, the gender of the perpetrator. The data suggest at least some form of behavioural avoidance of the gender of the perpetrator in a sexual context. This finding is *contrary* to research (e.g., Mezey and King, 1989; Walker, 1993) that reports the opposite trend (e.g., engaging in homosexual behaviour after experiencing NVS, but not before). It is interesting to note, however, that men in Mezey and King's (1989) and Walker et al's (2005) research were recruited by press advertisement seeking men who had experienced sexual assault. The possibility remains, then, that these men are more distressed and that this distress could (at least in part) be due to 'ego dystonic' sexual contact with a person(s) of the same gender as the perpetrator of NVS subsequent to the experience.

The data also show that confusion about sexuality is marginally significantly more common in men who have experienced NVS with a male. This could be due to distress/confusion associated with (undesired) sexual contact with another male(s). However, there is also some evidence that homosexual men who experience NVS with another man have come to be uncomfortable with their sexuality (Mezey and King, 1989; Walker et al, 2005).

Mental health problems and help seeking in childhood

Consistent with the proposed hierarchy of mental health problems associated with reported sexual experienced described in the method section, there was a significant linear trend for the presence of psychological disturbance (although this was found in the GP sample only). The non-significant findings for the linear trend in the GUM sample may have been due to an insufficient sample size in this sample and/or a high prevalence of such disturbance generally in this sample (see the comments regarding this possibility above). Again, the GP findings seem consistent with those of Dube et al (2005) that found that CSA involving intercourse was a stronger predictor of mental health problems than was CSA not involving intercourse (the highest rate of psychological disturbance in the GP sample was in those reporting intercourse and/or orogenital contact (38%) with a lower rate (32%) in those reporting CSA not involving intercourse or orogenital contact.

There was also a significant linear trend for help seeking from a mental health professional in the GP sample (there were clearly too few men in the GUM sample who sought help to find a significant effect). Nearly a quarter of men in the GP sample who experienced CSA, and reported mental health problems, reported receiving help for psychological disturbance. The data show, however, that multivariable analysis does not necessarily support the findings of the univariable linear trend analyses (see the findings above re mental health problems and help-seeking for same in adulthood).

It seems likely that the accuracy of reporting of both mental health problems and help seeking may be lower than that for similar experiences in adulthood as they are more remote in time and also because adults likely have a better understanding of the concepts of depression, anxiety, or phobia. This may be particularly true for problems experienced at a very young age, as Hardt and Rutter (2004) have argued that recall at very young ages is likely incomplete/imprecise.

Summary and recommendations regarding mental health problems (after age sixteen or where age of onset unspecified) and help seeking

In this summary the findings of the multivariable analyses are give primacy as these likely better represent the relationship between sexually abusive experiences and mental health problems and help seeking. Further, the emphasis is on NVS.

After controlling for confounders all of the reported sexual experiences were significant predictors (though in one case only marginally) of at least one mental health problem category (where the age of onset was after sixteen or unspecified). NVS was a (marginally) significant predictor of deliberate self-harm only.

NVS was a (marginally) significant predictor of help received from a mental health worker and a significant predictor of help from the category 'other' source of help. It is recommended that further research investigating the relationship between NVS and mental health and help seeking:

1. Utilise a different - or variety of - definition(s) of NVS to that employed here. This could include a list of behaviourally specific questions.

2. Inquire about the amount of distress victims report regarding the NVS experience both at the time of the experience and at the time of research participation. Such a distress variable could be used to divide those reporting NVS into those who did/did not report distress at the time subsequently (using statistical criteria such as a median split, > 1 standard deviation above the mean etc.). After dividing victims this way, investigations could be made into the characteristics of NVS experiences (e.g., gender of perpetrator, sexual acts) or of participants (age, sexuality, occupational class etc.) that are associated with increased distress and help seeking

3. Inquire about a wider range of mental health problems than used here and also inquire about physical health and various dysfunctional sexual behaviours (e.g., unprotected sex, anonymous sexual partners)

4. Further investigate the effects of interviewer on reporting of symptoms

5. Thoroughly review epidemiological research to identify those variables likely to affect the relationship between abusive sexual experiences and mental health such as marital status, family type, urban/rural residence, 'religiosity', and social support and control for them in multivariable analyses

6. Control for other adverse experiences in childhood

7. Inquire about contact with mental health services independent of reported symptoms (as did Plant et al, 2004)

CSA involving sexual intercourse and/or orogenital contact was a significant predictor of all categories of mental health problems (with CSA not involving intercourse or orogenital contact a significant predictor of four of five mental health categories). CSA involving intercourse and or orogenital contact was also more strongly associated (i.e., larger odds ratios) with mental health problem categories than was CSA not involving these experiences (in four of five cases). These findings are broadly consistent with those of Dube et al (2005). The conflated CSA variable was also a significant predictor of help received from a mental health professional. Again, this may represent an index of severity, or an increased likelihood of men who have experienced CSA to seek help for problems of equal severity to men who have not experienced CSA.

Sexuality

NVS perpetrated by a male was significantly associated with changes in reported sexuality between time of first (or only) NVS experience and time of research participation. NVS perpetrated by a male was also marginally significantly associated with confusion about sexuality since first (or only) experience of NVS. The research would have been improved by asking all participants about confusion regarding sexuality as this variable could have been used in multivariable regressions regarding the effects of sexually abusive experiences. It may also have been helpful to inquire about confusion about sexuality before experiencing NVS, as it is possible that such confusion could be a predictor of NVS (e.g., those unsure about their sexuality engaging in 'sexual experimentation' which could result in them experiencing NVS).

Mental health problems before age sixteen and help seeking

Consistent with the proposed hierarchy of severity of reported sexual experiences, there was a significant linear trend for reporting of psychological disturbance and for help seeking for psychological disturbance from a mental health professional before age sixteen (although this was found in the GP sample only).

Revictimisation

This section discusses the results with respect to the hypotheses, considers known and possible factors in revictimisation using the framework of an ecological model of revictimisation, and presents recommendations for further research.

Childhood sexual experiences and revictimisation

Any sexual revictimisation revictimisation

The hypothesis about sexually abusive experiences in childhood being significantly associated with, and significant independent predictors of, NVS was confirmed. A univariable analysis found a significant linear trend for revictimisation, which was most common in men who had experienced CSA involving orogenital contact and/or intercourse, less common still in men who had experienced CSA not involving orogenital contact or intercourse, even less common in men who reported ASE, and least common in men who reported no childhood sexual experiences. Further, and as predicted, age was negatively associated with NVS, while the reporting of male sexual partners was significantly associated with NVS.

In univariable analyses, the smallest odds ratio was for ASE experiences, with a larger odds ratio for CSA not involving orogenital contact or intercourse. The largest odds ratio was for CSE involving orogenital contact and/or intercourse .

The odds ratios decreased in size after controlling for confounders for ASE and CSA involving orogenital contact and/or intercourse, but *increased* for CSA not involving orogenital contact and/or intercourse. The data are consistent with the findings of Desai et al (2002) that CSA was a predictor of revictimisation in a representative sample of US citizens. The data are less consistent with those of Nelson et al (2002) and McGee et al (2002), however as the odds ratios for CSA involving orogenital contact and/or intercourse and for CSA not involving orogenital contact or intercourse were virtually identical. It is important to note, however, that neither Nelson et al (2002), nor McGee et al (2002) controlled for sexuality which was found to be a significant predictor in this research. Nelson et al (2002) controlled for other forms of abuse including physical abuse and neglect, and the effect on these data of controlling for these variables are obviously unknown. Further, there are differences in definition as, for example, Nelson

et al (2002) inquired only about rape in adulthood (rather than a broad range of NVS experiences as here.

The demonstrate that 'assenting' sexual experiences are also a significant predictor of revictimisation and as such can be seen as a criticism of research (e.g., Rind et al, 1998) questioning the harmful effects of males' childhood sexual experiences. As stated earlier, it seems likely that previous research may (depending upon the CSA definition employed) have either conflated these experiences with CSA (involving/not involving intercourse) and hence likely decreased the size of the effect for CSA on revictimisation generally, or failed to include such 'consenting' experiences (i.e., by only asking about forced/coerced experiences) which would also decrease the effect size of child sexual abuse on NVS. Whatever the case, these data show that even where the sexual contact with a person five or more years older before age sixteen was perceived as consenting, this contact is still significantly associated with NVS.

Unsurprisingly, sample site (i.e., GUM clinic) was a significant confounder. This was to be expected as the rate of NVS in this sample was much greater than in the GP sample.

Rape in adulthood according to the SOA 2003 definition

At the outset it should be stated that the data should be treated with extreme caution as they are based on only *twenty two* men who reported rape according to the SOA 2003 definition and who also supplied data about sexually abusive experiences in childhood.

The hypothesis about sexually abusive experiences in childhood being significantly associated with, and significant independent predictors of rape according to the SOA 200 3 definition was partially confirmed. A univariable analysis found a significant linear trend for revictimisation, which was most common in men who had experienced CSA involving orogenital contact and/or intercourse, less common in men who had experienced CSA not involving orogenital contact or intercourse, even less common in men who reported ASE, and least common in men who reported no childhood sexual experiences. As predicted, age was significantly negatively associated with NVS and reporting of male sexual partners significantly positively associated with NVS. Contrary to NVS in general, there was a significant negative association between CSA involving orogenital contact or intercourse and rape according to the SOA 2003

definition. Both CSA not involving orogenital contact or intercourse and assenting sexual experiences were significantly associated with rape according to the SOA 2003 definition, however.

The odds ratios for sexually abusive experiences in childhood decreased in size after controlling for confounders, with neither CSA involving orogenital contact and/or intercourse nor assenting sexual experiences significant predictors now being significant, while CSA not involving orogenital contact or intercourse remained significant.

These data are consistent with the findings of Desai et al (2002) that CSA was a predictor of revictimisation in a representative sample of US citizens. As before, the data are only partially consistent with those of Nelson et al (2002) and McGee et al (2002) in that they find that CSA not involving orogenital or intercourse was a significant predictor of NVS, although CSA involving orogenital contact or intercourse was not. As before, it is important to note, however, that neither Nelson et al (2002), nor McGee et al (2002) controlled for sexuality which was found to be a significant predictor in this research. Further, Nelson et al (2002) controlled for other forms of abuse including physical abuse and neglect, and the effect on these findings of controlling for these variables is obviously unknown. Further, there are differences in definition as, for example, Nelson et al (2002) inquired only about rape in adulthood and it is possible that men may have only considered the term to mean forced anal penetration.

Sample site (i.e., GUM clinic) was not a significant confounder in the multivariable analysis predicting rape according to the SOA 2003 definition.

Age and reporting of male sexual partners and revictimisation

The logistic regressions found that reporting male sexual partners (for NVS and rape according to the SOA Act 2003 definition) and younger age (for NVS only) were also significant predictors of revictimisation. There could be a number of reasons why MSM and younger men are more likely report NVS/rape:

First, these men may be more likely to *report* both of these experiences (i.e., be more truthful about having experienced them). Second, men who report male sexual partners

could be more at risk due to differences in their sexual behaviour. For example, it is known that these men have more sexual partners than do heterosexual men and that this may increase the probability of meeting a perpetrator. Third, the type of sexual partners chosen (e.g., MSM who report sexually abusive experiences in childhood are significantly more likely to report 'one night stands' (Paul et al, 2001) than those not reporting sexually abusive experience in childhood and this could be more true in MSM than in heterosexual men) and circumstances (e.g., 'cruising' areas) where MSM have some of their sexual encounters may place them at higher risk than heterosexual men. This is an important area for research since it is known that some MSM keep this sexual behaviour a 'secret' and, as such, they may be 'required' to go to known 'cruising' places. Perpetrators may also be aware of these places and attend them with the express purpose of forcing other men into sexual behaviour. It would certainly be important to know if 'cruising' (e.g., sex with unknown partners, perhaps in certain places) increases the risk of NVS. Fourth, MSM may engage in more ambiguous communication regarding sexual behaviour. Research testing differences between MSM and heterosexual men using Krahe et al's (2000) methodology could be used to test this proposition.

Age may increase the risk of sexual victimisation due to younger men: A) Having more sexual partners than older men (e.g., a cohort effect); B) Being more likely to have male sexual partners (as was found here and also by Mercer et al (2000)in their large representative sample of men in the UK; C) Being 'less experienced' in sexual situations (e.g., more ambiguous sexual communication: Krahe et al, 2000); D) Research shows that younger men are more likely to be victims of 'street crime' than are older men even when controlling for numbers of nights out per week and attending 'risky' venues (i.e., going to pubs, clubs, discos or parties: Clarke, Ekblom, Hough and Mayhew, 1985); E) Perhaps being more likely to use drugs or be heavily drunk during sexual encounters (and thus having impaired decision making/defensive capabilities); and F) Younger men may also be more 'sexually attractive' to perpetrators.

Statistical issues – controlling for other confounders

This research did not control for childhood adversity other than CSA (e.g., physical abuse, neglect, parental conflict/substance use problems), however. This is important since it is known that such 'overlap' between CSA and other experiences is high (see previous discussion on effects of sexually abusive experiences in childhood on mental

health). It is possible (indeed likely) that controlling for such adverse experiences in childhood in this research could have affected the size – and/or significance- of the odds ratios obtained. As such, the findings from this research, while consistent with other research on revictimisation, should be treated with some caution. Previous research that has controlled for other forms of childhood adversity/experience (Desai et al (2002); Nelson et al (2002)) has still found that CSA is an independent predictor of NVS, however. Controlling for family environment factors is somewhat complicated, though, since it is possible that memories of family environment are affected (biased) by the experience of child sexual abuse (Nash et al, 1993).

Why are those who have sexually abusive experiences in childhood more likely to experience NVS?

Research on human problems is most helpful when it not only demonstrates phenomena, but tests causal mechanisms: Knowing that sexually abusive experiences are significant predictors of NVS/rape is important, but knowing why is much more helpful.

An ecological model of revictimisation

Messman-Moore and Long (2003) argue that research on revictimisation is currently disjointed with researchers focusing on various aspects of CSA victim's experiences/psychopathology in an attempt to understand why these victims are more vulnerable to NVS. Messman-Moore and Long (2003) believe that an ecological model of revictimisation (Grauerholz, 2000) is helpful in understanding revictimisation since it considers factors at different 'levels' of explanation and factors both distal and proximal to NVS. It seems clear that such a model will be required to adequately understand social phenomena (in this case revictimisation) in order to avoid the 'atomistic' (i.e. researching only factors about persons) and 'ecological' (i.e., considering only environmental factors such as location, seasonal effects etc) fallacies (see Diez Roux (2002) for a discussion of these fallacies). Grauerholz's (2000) model identifies four levels at which revictimisation should be researched:

1) Ontogenetic development

In Grauerholz's model this level refers to the environment in which the child matures. There is good evidence that there is overlap between different types of early abusive experiences and that such abusive experiences can affect both brain and behaviour:

A). Other forms of abuse in childhood in addition to sexual abuse

It is clear that forms of childhood adversity other than CSA are important in revictimisation since; A) There is overlap between CSA and other forms of abuse (May-Cahal and Cawson, 2005; MacMillan, Fleming, Streiner, Lin, Boyle, Jamieson, Duku, Walsh, Wong and Beardslee (2001); and B) Other forms of child abuse either increase the risk of CSA, or are also predictors of NVS (e.g., physical abuse – see Desai et al, 2002).

B.) Effects of child abuse on physical development

Research demonstrates that child abuse is associated with decreased tissue volumes in a number of brain areas (Teicher et al, 2000). Further, structural imaging research on female victims of CSA (with PTSD) has found that both the severity and duration of CSA are (significantly) negatively correlated with hippocampal size (Driessen, Herrman, Stahl, Zwann, Meier, Hill, Osterheider and Petersen, 2000: these findings are particularly impressive since they are not affected by shared method variance). It seems reasonable to conclude that these differences in brain structure in victims of child abuse are likely to impact on behaviour.

Thus, in attempting to understand a person's risk of revictimisation it is necessary to have a full understanding of the range of abusive experiences they have experienced and the effects that these can have on their development.

2) Microsystem

The microsystem refers to the interaction between the perpetrator's behaviours and the victim's behaviour and vulnerability. Messman-Moore and Long divide the microsystem into two areas:

A) Exposure risk

It is clear that sexual behaviours such as those reported by Steel and Hurlitz and reviewed by Purcell et al (e.g., casual sexual partners, increased number of sexual partners, group sex, sex-work) may increase risk of exposure to NVS and lead to revictimisation due to the potential for being in vulnerable situations and/or a propensity to persist in sexual situations that are dysfunctional (e.g., when there is a risk of STI or unplanned pregnancy). Authors have argued that the increased number of sexual partners observed in those who have been sexually abused in childhood may

lead to revictimisation simply because a greater number of sexual partners may increase the probability of meeting a perpetrator (Messman-Moore and Long, 2002; Muehlenhard, Highby, Lee, Bryan, and Dodrill, 1998).

B) Psychological vulnerability

Why do those who have experienced sexually abusive experiences in childhood engage in risky/unsafe sexual practices? Paul et al (2001) argue that 'Long-term patterns of sexual aggression or sexual helplessness [in childhood] often result in the establishment of rigid, invariant sexual scripts that promote sexual risk-taking (e.g., through an inability to either insist on healthy sexual practices, or care about the health of others)'. In their large sample of MSM, Paul et al (2001) demonstrated that CSA was a strong predictor of sexual risk-taking (1: Unprotected anal intercourse with a non primary sexual partner; 2: unprotected anal intercourse with an HIV serodiscordant partner). Multivariable logistic regressions found that CSA was no longer a significant predictor of these sexual risk-taking behaviours after controlling for a number of variables ('one-night stands, anal sex under the influence of alcohol/drugs, having been in an abusive relationship in the last 5 years, revictimisation), demonstrating that these variables mediated the relationship between CSA and the sexual risk-taking behaviours. Paul et al (2001) argue that 'one-night stands' may indicate sexual preoccupation, reduced interpersonal regulation ability, and diminished capacity to assess risk. Paul et al (2001) also argue that the use of alcohol/drugs when experiencing anal sex may reflect an escape/avoidance strategy (i.e., to cope with psychological distress), which has the effect of reducing the victim's capacity to negotiate safe sexual conduct.

Paul et al's (2001) research identifies a number of behaviours that mediate the risk between CSA and unsafe sexual practices, but did not assess the effect of these practices on revictimisation risk (although Paul et al tested whether revictimisation was a significant predictor of sexual risk taking behaviour and found that it was not). Paul et al's (2001) data apply only to MSM, however, and it is clearly important that similar research needs to be conducted to identify variables that mediate CSE exposure and NVS in all men.

A number of theories have been proposed in an attempt to explain revictimisation (e.g., the psychodynamic concept of 'repetition compulsion' (van der Kolk, 1989); the numbing phase of PTSD (Chu, 1992); impairments in attachment (Gold, et al, 1999)

and ecological models (Grauerholz, 2000): see Arata, 2002, and Messman-Moore and Long, 2003 for reviews). It is clear, however, that these theories have been created (almost exclusively) from research on female victims and psychological vulnerability factors may differ for male and female victims. Further, it is likely a difficult task for any one theory (or given psychological vulnerability) to explain why rates of revictimisation vary according to CSA. For example, it seems that a model that posits PTSD symptoms as risk factors for revictimisation may be more applicable to CSA involving intercourse than to ASEs. In short: '.... victimization is such a complex phenomena that it is unlikely that any one theory will fit all cases' (Arata, 2002).

Research on variables that mediate child sexual abuse exposure and NVS will likely be required to operationalise a number of variables from extant theories to create variables that can be tested for their significance as mediator variables[13] between child sexual abuse and NVS. Krahe et al's (2000) research suggests that ambiguous sexual communication would be an obvious and potentially important potential mediator.

4) Exosystem

Exosystem factors include factors such as low socio-economic status or extreme socio-economic disadvantage such as homelessness and unsafe environments. Holmes and Slap (1998) report that a number of studies have found increased rates of CSA in boys raised in economically disadvantaged families, and there is good evidence that homeless men report NVS (Wenzel et al, 2000; Kushel et al, 2003). It is likely, however, that rates of child sexual abuse according to class will vary according to definition. For example, while the rate of CSA (definitions 1 and 2 combined) did not differ according to occupational class in this study, ASEs were significantly more common in manual workers (and ASEs are significant predictors of NVS). Finally, of course, occupational class is a proxy for many factors (e.g., living in higher crime areas) that may increase the risk of NVS. Further research into these factors would be helpful in further understanding risk of revictimisation

[13] Where a mediator is defined as a "... generative mechanism through which the focal idependent variable is able to influence the dependent variable of interest' (Baron and Kenny, 1986), quoted in Paul et al (2001)

4) Macrosystem

> *'We are part of our environment. One cannot separate ... experience of, or recovery from, sexual trauma from the sociocultural environment in which it is experienced' (Lebowitz and Roth, 1994).*

The macrosystem refers to cultural norms and institutions that may increase (or at least do less to deter) the likelihood of sexually abusive experiences in childhood, NVS and/or both. Such macrosystem factors are sometimes difficult to define but could include legal, 'bias', mental health service provision and research focus issues'.

Legal issues

The anal rape of a man did not become a crime until 1994 and forced fellatio was not considered an act of rape before 2003 (Card, 2004). Before 1994 forced anal penetration of a man was a crime of non-consensual buggery and carried a maximum penalty of ten years imprisonment, compared with the possibility of a life sentence for the crime of rape in the 2003 Sexual Offences Act. Further, the Mental Health Act of 1983 makes sexual contact between a mentally well male and a mentally ill/learning disabled female illegal, but male psychiatric patients were not protected under the Act from female perpetrators (This has been rectified in the 2003 Act – see Card (2004)). Thus, it could be argued that previous legislation was less of a deterrent to potential perpetrators of NVS than is currently the case.

'Bias'

Men who have sex with men report being sexually assaulted by other men simply because they are gay/bisexual (e.g., Herek et al, 1999). Further, Hickson et al (1994) report that sexual assault of gay/bisexual men in their sample was sometimes perpetrated by heterosexual men and that this was '...clearest in the cases where the victim considered his assailant(s) as heterosexual, and where the assault followed his identification as gay, and reported antigay violence'. Thus, it is possible that some gay men may experience NVS due to such 'gay bashing' incidents and may therefore be at higher risk of NVS in adulthood.

There is literature from prison environments that indicates a bias against (or at least indifference toward) prisoners. For example, one prison researcher found that:

> *'One victim screamed for over an hour while he was being gang-raped in his cell; the block guard ignored the screams and laughed at the victim when the rape was over. The inmates who reported this passed a polygraph examination. The guard who had been named refused to take the test'.* Davis (1968).

Research on Correctional Officers' attitudes (Eigenberg, 1989) toward male rape found that:

- 97% 'indicated that they should try to prevent rape'
- 93% do not believe it acceptable that men should be placed in cells where they could be raped
- 92% report that they should write disciplinary reports when men report being pressured for sex, and that they should encourage men to report being raped.

Of interest are the small (but practically significant) percentages, which indicate that Correctional Officers' may hold beliefs, or act in a way(s), contrary to their duty of care. Further, Eigenberg found that nearly half (45%) of the Correctional Officers in his sample thought that some victims deserved to be raped if they had already engaged in consensual sexual activity with another prisoner.

Mental health service provision

Research shows that while mental health professionals are aware of the sexual abuse of boys they rarely inquire about such a history in their patients (Lab et al, 2000). Further, there is evidence that men who go for help regarding sexually abusive experiences in childhood are not always believed or helped (Denov, 2003). Thus, it seems possible that a lack of knowledge about the sexual abuse of boys may result in victims being less likely to receive help, which, in turn, may lead to an increased likelihood of NVS. Of course, inappropriate or unhelpful interventions from mental health professionals may also increase the likelihood of NVS.

Research focus

The introduction highlighted the fact that, in comparison with female victims of sexual crime, the literature on male victims is much smaller and less well developed (Tewkesbury and Mustaine, 2001; Spitzberg, 1999). A lack of research in an area leaves ignorance unchallenged and can (inadvertently) lead to the persistence of myth. A lack of research into male victims of NVS will obviously impact upon an understanding of factors associated with revictimisation.

Societal myths

Although legislation has recently accepted and made illegal the rape of a male, there are a number of societal myths about the sexual assault of males (Gonsiorek, Bera and LeTourneau, 1994) that likely inhibit reporting by victims. As mentioned previously, one of these myths is that a man cannot be forced into sexual contact.

Further myths about male sexual assault include the myth that 'a man who sexually assaults another man must be gay' and this combined with the further myth's that 'a man sexually assaulted by another man must himself be gay or have been acting like a gay man' and 'erection or ejaculation by the victim imply that he was complicit in some way' likely inhibit reporting of NVS, with the corollary of maintaining ignorance of/myths about sexual assault of males by other males.

It seems likely that there exist similar myths about sexual assault of males perpetrated by women. Certainly, Mathis (1972) appears to find the notion of female involvement in CSA with boys unlikely and, in any event, trivial:

> *'That* [a woman] *might induce a helpless child into sexplay is unthinkable, and even if she did so, what harm can be dome without a penis?'*

It is possible that societal views about *adult* male victims of NVS perpetrated by females may be even more extreme

In summary, according to Grauerholz's model, revictimisation can be seen as being attributable to a number of possible (and likely interacting) factors/levels. Further, it is clear that different levels (or combinations of levels) may better explain different experiences of NVS. For example, Hickson et al report that a man was raped by a

number of his work colleagues after they learned he was gay. In such an instance, the man's violation of cultural norms about masculinity and dislike of homosexuality may be the most important (macrosystem) factors. Conversely, regular drinking of strong alcohol and regular attendance at a bar (Tewkesbury and Mustaine, 2001) may be associated with the importance of microsystem (psychological vulnerability) and exosystem (if the bar is in an unsafe neighbourhood) factors.

Recommendations for further research

Definition of NVS and CSA/ASE

As argued above, it will likely be very useful to standardise definitions of NVS and sexually abusive experiences in childhood before engaging in theorising about psychological/sociocultural factors. Without such 'standardisation' samples used to test theoretical postulates in NVS victims may be too diverse (the sample may contain people who have had sexually abusive experiences in childhood that are not significantly associated with NVS) and this could reduce the likelihood of understanding the effect of a given 'psychological vulnerability'/sociocultural factor. An example should suffice. Mayall and Gold (1995) obtained data from 669 female students regarding CSA (three levels of severity) and NVS (three levels of severity). Mayall and Gold found no evidence for revictimisation where definitions that included various forms of sexual activity in childhood and adulthood (e.g., exhibitionism, showing genitals to another, kissing/hugging due to verbal/physical threats or physical force), but excluded other forms of sexual behaviour were employed. Conversely, there was a significant association between CSA and NVS where the definitions of CSA/NVS involved physical contact (with breasts/genitals) and/or intercourse due to physical threat or force. Thus, it is clear, that different definitions of CSE (and NVS) affect the rate of revictimisation and have important implications for theoretical explanations of revictimisation.

It would likely prove very useful to develop definitions of sexually abusive experiences after extensive consultation (e.g., focus groups) with victims and large panels of researchers. Further, it is obviously essential that definitions demonstrate good levels of test re-test reliability.

Sexual communication/behaviour

It seems clear also that Krahe et al's (2000) approach has potential merit in further understanding revictimisation (e.g., is such ambiguous communication more prevalent in MSM, those who have experienced CSA involving intercourse etc.). Other potential mediators/moderators of the relationship between sexually abusive experiences in childhood and NVS suggested by the research of Paul et al, (2001), Steel and Hurlitz (2005) and reviewed by Purcell et al (2004) could also be tested in future research. Once valid mediators/moderators have been identified further research (likely including qualitative approaches) could be employed to understand why, for example, those who report sexually abusive experiences in childhood are more likely to engage in certain behaviours (e.g., drug use during sexual encounters) that predict NVS.

Multivariable analyses

It is clear that future research in this area needs to control for a variety of potential confounders (including a variety of childhood experiences that should be assessed by psychometrically robust instruments – see section on mental health effects above) to ensure that the precise role of (differently described) sexually abusive experiences in childhood in future NVS is properly ascertained.

Therapy trials

In future it would likely be very useful to develop a protocol for individual Cognitive Behavioural Therapy or a source of information that could be used as a form of bibliotherapy with men who have experienced NVS/CSA. Such therapy trials could be conducted as 'within subjects' designs (with outcome measures assessed over a number of timepoints) or outcomes could be compared with waiting list controls. It is clear, however, that there a a wide number of outcomes that could be considered including mental health problems and a reduction in the rate of future experience of NVS.

Summary

The findings supported nearly all of the hypotheses. The prevalence of NVS in the GP sample was broadly consistent with a number of studies of NVS in males conducted both in the UK and abroad. The prevalence rate of NVS in the GUM sample was higher than previous studies on these samples. Younger men were significantly more likely to report NVS, suggesting that the prevalence rate has increased over time.

NVS was more common in men who reported male sexual partners (both samples), and reporting of male sexual partners was also significantly associated with male perpetrator of NVS and ASE (but not CSA). NVS was also significantly associated with changes in sexuality and marginally significantly associated with confusion about sexuality after experiencing NVS. NVS was also marginally significantly (in the GP sample) associated with 'freezing' when experiencing NVS with a male perpetrator.

NVS was a marginally significant predictor of self-harm in adulthood. Child sexual abuse involving orogenital contact or intercourse was a significant predictor of all types of mental health problems inquired about. Child sexual abuse not involving orogenital contact or intercourse and child sexual abuse was a significant predictor of all mental health problems inquired about except substance misuse. Assenting sexual experiences were significant predictors of self-harm.

NVS was a significant predictor of help received from a mental health worker, and some 'other' source, while child sexual abuse was a marginally significant predictor of help from a mental health worker.

Both forms of CSA and ASE were significant predictors of NVS (as were reporting of male sexual partners and younger age). Only CSA not involving orogenital contact or intercourse was a significant predictor of rape according to the SOA 2003 definition, however (and these data need to be interpreted with caution as numbers of men were reporting rape according to the SOA 2003 definition were very small).

It is clear that the most pressing issue in research on NVS is the definition of NVS (and CSA/ASE) as this will impact upon the prevalence rate obtained and also associations with mental health/behavioural problem outcomes. There is a strong need to develop a reliable definition of these experiences that could be used in epidemiological studies. Similar findings regarding prevalence and associations with mental health/behavioural problems derived from such research would add validity to the growing database on the predictors and effects of NVS in adult men (Publications arising from this research may be found in Appendix 6).

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Appendix 1 Search terms

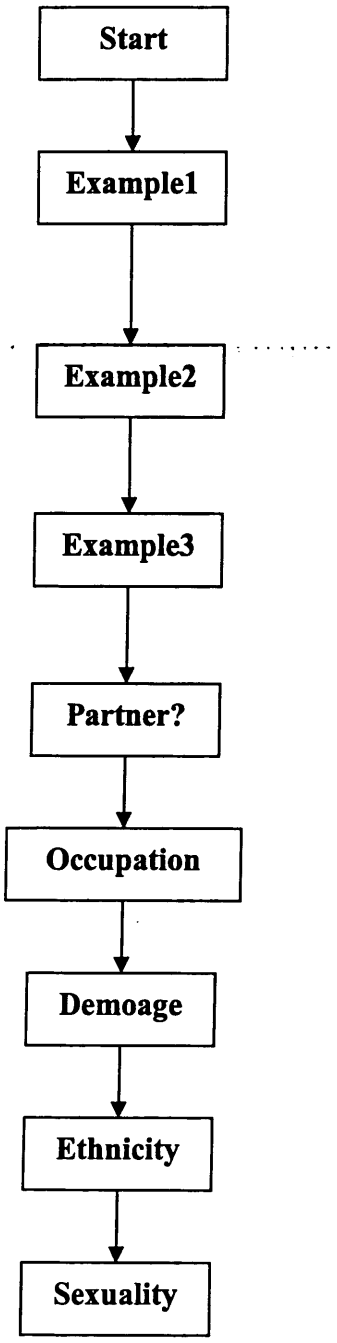
The search was narrowed (and made more appropriate) by specifying that papers must include males and report research on adults (and be in English). Journals with a high proportion of papers reporting USEs (e.g., The Journal of Interpersonal Violence) were also hand searched.

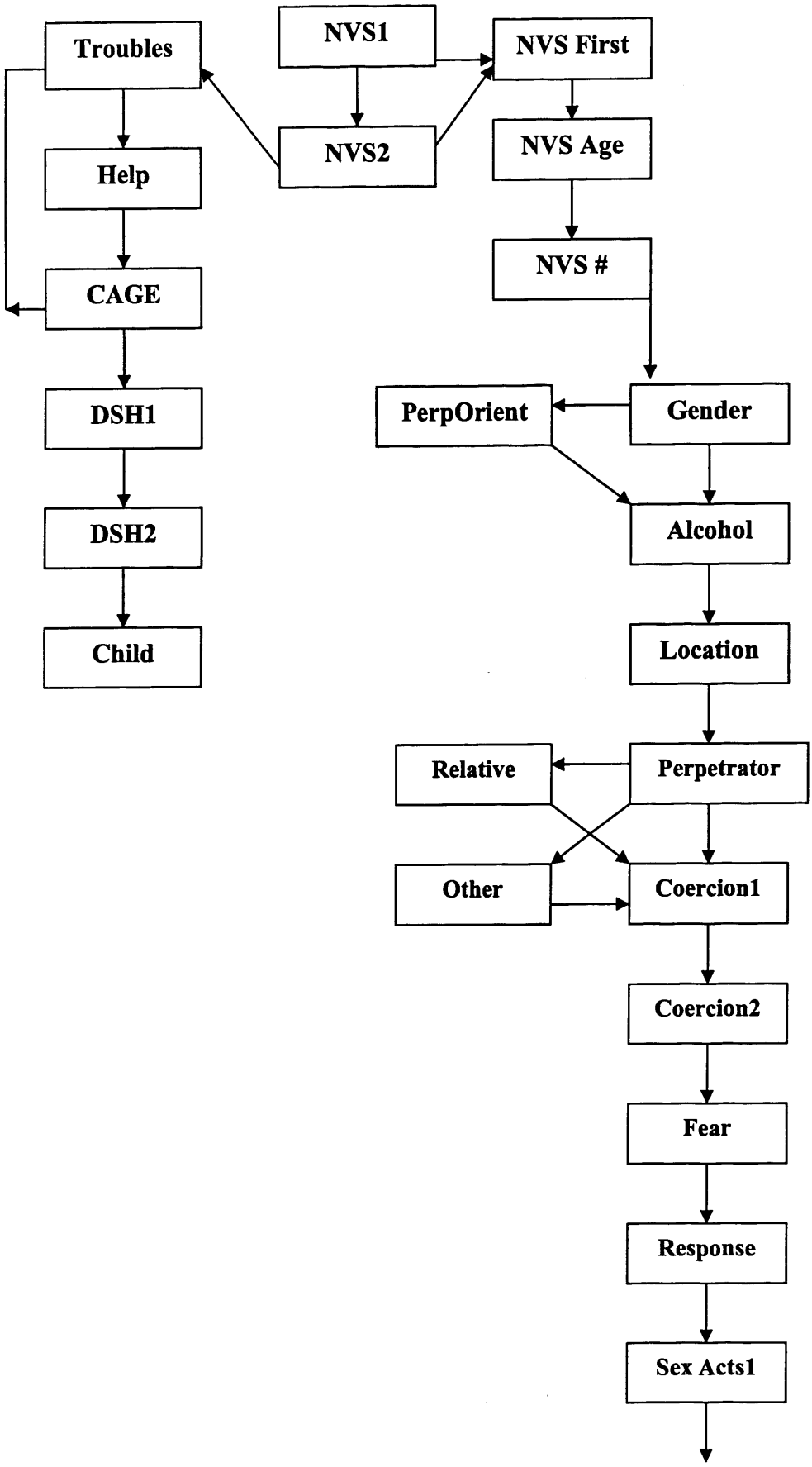
The following terms were used for the search as a preliminary search found that a wide variety of terms were used in the literature.

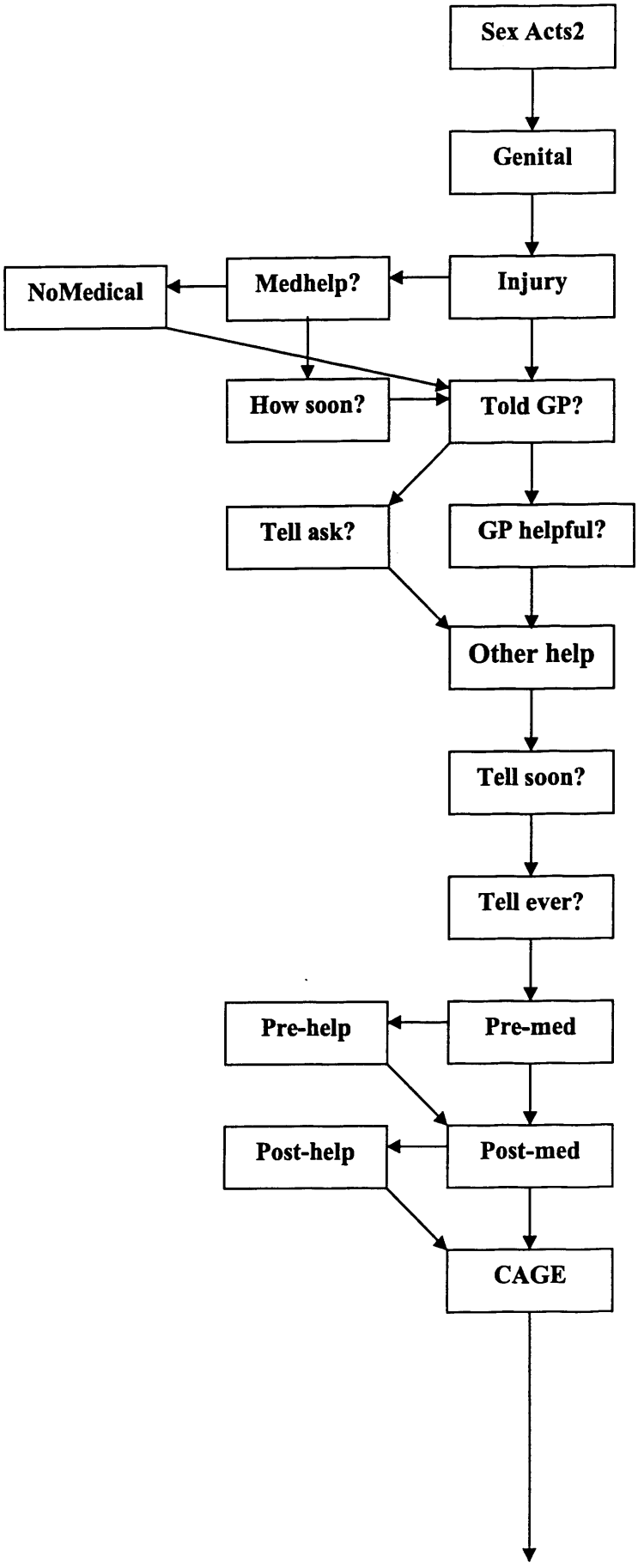
Rape
Child abuse
Child sexual abuse
Sexual coercion
Sexual battering
Sexual molestation
Sexual violence
Sexual abuse
Sexual victimisation
Sexual aggression
Forced sex
Coerced sex
Sexual trauma
Nonconsensual
Non-consensual
Nonvolitional
Non-volitional
Interpersonal violence
Traumatic events
Trauma exposure
Violent trauma

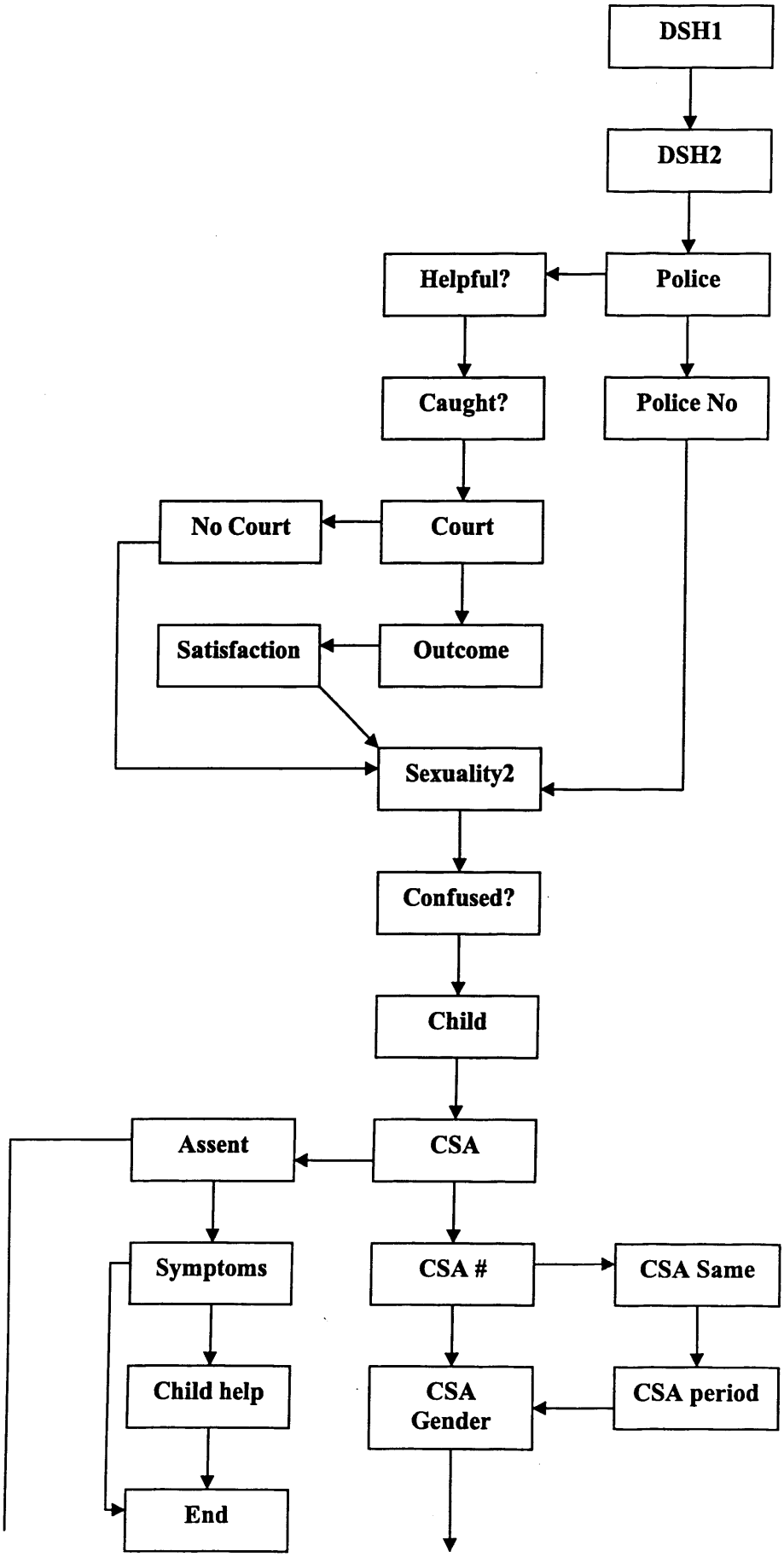
Appendix 2 Interview Algorithm

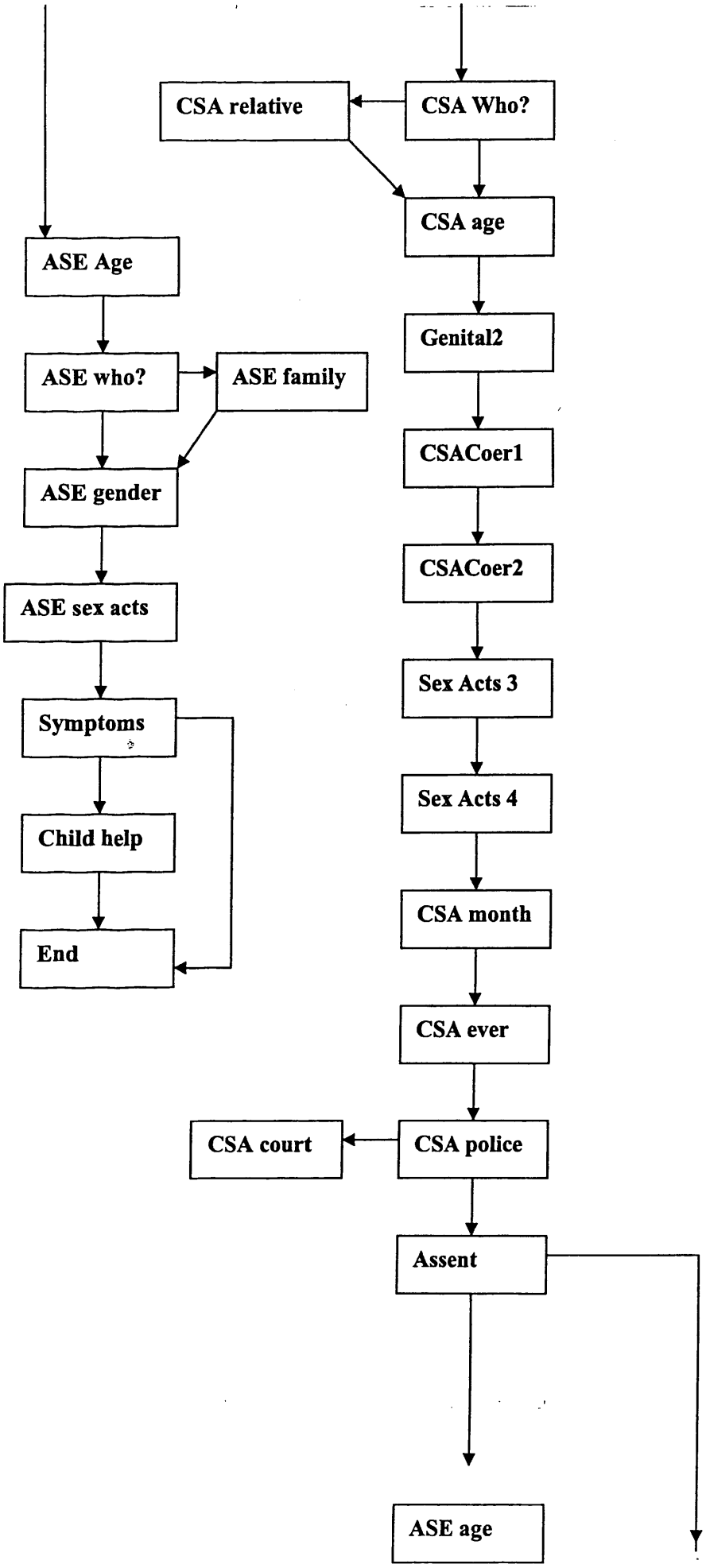
The principal algorithm for the interview is presented below. Note that there are a number of paths through the interview contingent upon the responses of participants.

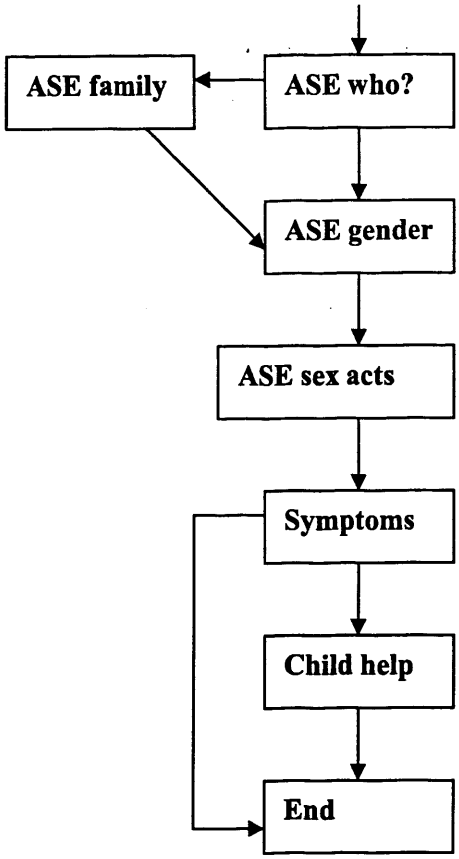



Troubles
NVS1
NVS First
Help
NVS2
NVS Age
CAGE
NVS #
DSH1
PerpOrient
Gender
DSH2
Alcohol
Child
Location
Relative
Perpetrator
Other
Coercion1
Coercion2
Fear
Response
Sex Acts1


Sex Acts2
Genital
Injury
Medhelp?
NoMedical
How soon?
Told GP?
Tell ask?
GP helpful?
Other help
Tell soon?
Tell ever?
Pre-help
Pre-med
Post-help
Post-med
CAGE


DSH1
DSH2
Police
Helpful?
Police No
Caught?
Court
No Court
Outcome
Satisfaction
Sexuality2
Confused?
Child
CSA
Assent
CSA #
CSA Same
Symptoms
CSA period
CSA Gender
Child help
End


CSA relative
CSA Who?
CSA age
ASE Age
Genital2
ASE who?
ASE family
CSACoer1
ASE gender
CSACoer2
ASE sex acts
Sex Acts 3
Symptoms
Sex Acts 4
Child help
CSA month
End
CSA ever
CSA court
CSA police
Assent
ASE age


ASE family
ASE who?
ASE gender
ASE sex acts
Symptoms
Child help
End

Appendix 3

Text in italics indicates the name of the item, the path through the interview algorithm contingent upon responses and the response type of the questionnaire item. The text in the shaded area is the text presented on the laptop screen to the participants. The other text refers to the name of the item, the destination of the next question and the current question type. There were some differences in the questions posed to participants in the GP and GUM samples. These differences related solely to characteristics of the NVS experience. Question differences are indicated for each question where relevant.

Item: **Start**	Next item
During this interview the computer will ask you some personal questions. Please remember that the answers you provide are COMPLETELY ANONYMOUS. If you need help using the computer feel free to ask the researcher who will be happy to assist you. The computer tells you when you have finished. However, you can stop AT ANY TIME by pressing the key marked END.	*Example1*
Response type	*Participant presses '→' key to move on*

Item: **Example1**	Next item
Sometimes you will be able to give more than one answer to a question. You will be told when you can do this. When you can give more than one answer you will see boxes next to the answers	
You can answer this question	*Example2*
And this question	*Example2*
If you make a mistake just press the number again and the cross disappears	*Example2*
Response type	*Many of many*

Item: Example2	Next item
Sometimes you can give only ONE answer. When you can only give one answer you will see circles next to the answers.	
You can choose this answer	*Example3*
Or this answer	*Example3*
When you choose an answer a spot appears in the circle	*Example3*
Response type	*One of many*

Item: **Example3**	**Next item**
Sometimes you will be asked to enter a number. You enter a number using the same keys as before	
<Participant enters number>	*Partner*
Response type	*Numeric entry*

Item: **Partner?**	**Next item**
Do you (you can give more than one answer)	
Have a wife that you live with?	*Occup*
Have a wife that you do NOT live with?	*Occup*
Have a lover or sexual partner that you live with?	*Occup*
Have a lover or sexual partner that you do NOT live with?	*Occup*
None of these	
Response type	*Many of many*

Item: **Occupation**	**Next item**
Please enter your occupation in the box below	*Demoage*
Response type	*Free text entry*

Item: **Demoage**	Next item
Please enter your age in the box below	*Ethnic*
Response type	Participant enters number
Response type	*Numeric entry*

Item: **Ethnicity**	Next item
What is your ethnic background?	*Sexuality*
White UK	*Sexuality*
White other	*Sexuality*
Black African	*Sexuality*
Black Caribbean	*Sexuality*
Black UK	*Sexuality*
Indian	*Sexuality*
Pakistani	*Sexuality*
Bangladeshi	*Sexuality*
Chinese	*Sexuality*
Other	*Sexuality*
Response type	*One of many*

Item: **Sexuality**	Next item
Are you:	
Gay (Homosexual)	*NVS1*
Gay, but sometimes fantasise about sex with women	*NVS1*
Gay, but sometimes have sex with women	*NVS1*
Bisexual	*NVS1*
Straight, but sometimes have sex with men	*NVS1*
Straight, but sometimes fantasise about sex with men	*NVS1*
Straight (Heterosexual)	*NVS1*
Response type	*One of many*

Item: **NVS1**	Send to
We will start by asking you about UNWANTED SEX. Unwanted sex is when: A person(s) uses force –or other means– so that they can do sexual things to you that you did not want them to do A person uses force – or other means– to make you do a sexual thing that you did NOT want to do These things can be done by men and also by women. Has anything like this happened to you SINCE YOU WERE 16?	*NVS2*
Yes	*NVS First*
No	*NVS2*
Response type	One of many

Item: **NVS2**	Send to
We want you to be sure what we mean by unwanted sexual experiences. Unwanted sexual experiences are things like: Doing sexual things – or having sexual things done to you – because a person(s) threatened to harm you Doing sexual things – or having sexual things done to you – just to get out of a dangerous situation Have any of these things happened to you SINCE YOU WERE 16?	
Yes	*First*
No	*Troubles*
Response type	*One of many*

Item: **First**	Next item
You said that you have been made to have unwanted sex. Was this the first time that you had ever done sexual things with another person?	
Yes	*NVS age*
No	*NNS age*
Response type	One of many

Item: **NVS age**	Next item
How old were you when this FIRST happened? Remember that your answer is for unwanted sexual experiences you have had SINCE you were 16	
<Participant enters number>	NVS #
Response type	*Participant enters number (will not accept age of less than eightteen or greater than 100)*

Item: **NVS #**	Next item
On how many DIFFERENT OCCASIONS have you been made to have unwanted sex SINCE you were 16?	
Once	Gender
Twice	Gender
Three times	Gender
Four times	Gender
Five times	Gender
More than five times	Gender
Response type	*One of many*

Item: **Gender**	Next item
GP How many people have made you have unwanted sex? GUM Please tell us who made you have unwanted sex . If this has happened more than once please tell us about the most serious time. The most serious time is the time that affected you the most.	
One man	PerpOrient
More than one man	PerpOrient
One woman	Alcohol
More than one woman	Alcohol
A man and a woman	PerpOrient
A group of people including men and women	PerpOrient
Response type	Many of many

Item: **PerpOrient**	Next item
GP Please tell us if you think- or know- that the man (or men) who FIRST (or the only time) made you have unwanted sex was Gay (homosexual), Straight (heterosexual), or Bisexual	
GUM Please tell us if you think- or know- that the man (or men) who made you have unwanted sex was Gay (homosexual), Straight (heterosexual), or Bisexual. If this has happened more than once since you were sixteen please tell us about the most serious time. The most serious time is the time that affected you the most.	
I THINK the man (men) was gay (homosexual)	Alcohol
I THINK the man (men) was straight (heterosexual)	Alcohol
I THINK the man (men) was bisexual	Alcohol
I THINK it was a mixture of gay/straight/bisexual men	Alcohol
I KNOW the man (men) was gay (homosexual)	Alcohol
I KNOW the man (men) was straight (heterosexual)	Alcohol
I KNOW the man (men) was bisexual	Alcohol
I KNOW it was a mixture of gay/straight/bisexual men	Alcohol
I KNOW the man (men) was gay (homosexual)	Alcohol
No idea	Alcohol
Response type	One of many

Item: **Alcohol**	Next item
Had you been drinking alcohol before the FIRST (or only) time you were made to have unwanted sex since you were 16?	
No	*Location*
Yes, but I did not feel drunk	*Location*
Yes, I felt quite drunk	*Location*
Yes, I felt very drunk	*Location*
Response type	*One of many*

Item: **Location**	Next Item
GP sample Please tell us about ALL the places you have been made to have unwanted sex since you were 16. You can give more than one answer	
GUM sample Please tell us about the place you were made to have unwanted sex the most serious (or only) time since you were 16. The most serious time is the time that affected you the most	
Outdoors, for example a street or park	*Perpetrator*
In a vehicle	*Perpetrator*
In a public place	*Perpetrator*

Item: **Location**	Next Item
In a pub or club	*Perpetrator*
At work	*Perpetrator*
At the home of the person who made you have unwanted sex	*Perpetrator*
In your home	*Perpetrator*
None of the above	*Perpetrator*
Response type	*Many of many*

Item: **Perpetrator**	Next item
GP sample: Since you were 16 have ANY of these people made you have unwanted sex? You can give more than one answer.	
GUM sample: Who made you have unwanted sex? Remember that your answer is for the most serious (or only) since you were 16. The most serious time is the time that affected you the most.	
Relative(s)	*Relative*
Someone not in this list	*Other*
Someone you knew by sight	*Coercion1*
Someone you knew by name only	*Coercion1*
Wife	*Coercion1*
Ex-wife	*Coercion1*
Lover or sexual partner	*Coercion1*
Ex-lover or sexual partner	*Coercion1*
Friend(s)	*Coercion1*
Someone from work	*Coercion1*
Response type	*Many of many*

Item: **Other**	Next item
Was it any of these people? You can give more than one answer	
A religious representative (e.g., a priest or rabbi)	Coercion1
Lecturer or teacher	Coercion1
Police	Coercion1
Doctor or nurse	Coercion1
Counsellor or therapist	Coercion1
Care worker or social worker	Coercion1
Taxi driver	Coercion1
Other person(s)	Coercion1
Response type	*Many of many*

Item: **Coercion1**	Next item
GP sample: After you were 16 did ANY person who made you have unwanted sex do ANY of these things? You can give more than one answer.	
GUM sample: Did the person(s) who made you have unwanted sex do any of these things? Remember that your answer is for the most serious (or only) time. The most serious time is the time that affected you the most. You can give more than one answer.	
Drugged you	*Coercion2*

Item: **Coercion1**	Next item
Got you drunk	*Coercion2*
Bribed you	*Coercion2*
Blackmailed you	*Coercion2*
Said they would hurt you	*Coercion2*
Said they would kill you	*Coercion2*
None of these things	*Coercion2*
Response type	*Many of many*

Item: **Coercion2**	Next item
GP sample: After you were 16 did ANY person who made you have unwanted sex do ANY of these things? You can give more than one answer.	
GUM sample: After you were 16 did the person(s) who made you have unwanted sex do any of these things? Remember that your answer is for the most serious (or only) time. The most serious time is the time that affected you the most. You can give more than one answer.	
Say insulting things	*Fear*
Shout or scream at you	*Fear*
Slap, push or handle you roughly	*Fear*
Beat, punch, or kick you	*Fear*
Tie you up or gag you	*Fear*
Threaten you with a weapon	*Fear*
Hurt you with a weapon	*Fear*
None of these things	*Fear*
Response type	*Many of many*

Item: **Fear**	Next item
GP: Did you ever feel that you might be killed when you were made to have unwanted sex since age 16?	
GUM: Did you ever feel that you might be killed when you were made to have unwanted sex since age 16? Remember that your answer is for the most serious (or only) time. The most serious time is the time that affected you the most. You can give more than one answer.	
Yes	Response
No	Response
Response type	One of many

Item: **Response**	Next item
GP: How did you react the FIRST (or only) time you were made to have unwanted sex since age 16? You can give more than one answer.	
GUM: How did you react when you were made to have unwanted sex	

Item: **Response**	Next item
since age 16? Remember that your answer is for the most serious (or only) time. The most serious time is the time that affected you the most. You can give more than one answer.	
'Froze' and could not help yourself	*Sex Acts1*
Fought back	*Sex Acts1*
Tried to reason with the person	*Sex Acts1*
Shouted or screamed at the person	*Sex Acts1*
Did what you were told to do	*Sex Acts1*
Begged them to let you go	*Sex Acts1*
Said you would do some things, but not others	*Sex Acts1*
None of these things	*Sex Acts1*
Response type	*Many of many*

Item: **Sex Acts 1**	Next item
GP sample Since you were 16 did ANY of these things happen when you were made to have unwanted sex? You can give more than one answer.	
GUM sample Since you were 16 did ANY of these things happen when you were made to have unwanted sex? Remember that your answer is for the most serious (or only) time. The most serious time is the time that affected you the most. You can give more than one answer.	
Your genitals were touched	*Sex Acts 2*
You were masturbated (wanked)	*Sex Acts 2*
Your penis was sucked	*Sex Acts 2*
A man urinated in you	*Sex Acts 2*
An object was put in your anus	*Sex Acts 2*
You were raped anally	*Sex Acts 2*
A person took sex photo's of you	*Sex Acts 2*
None of these things	*Sex*

Item: **Sex Acts 1**	Next item
	Acts 2
Response type	*Many of many*

Item: **Sex Acts2**	Next item
GP sample Since you were 16 did were you made to do ANY of these things happen when you were made to have unwanted sex? You can give more than one answer.	
GUM sample Since you were 16 were you made to do ANY of these things happen when you were made to have unwanted sex? Remember that your answer is for the most serious (or only) time. The most serious time is the time that affected you the most. You can give more than one answer.	
Masturbate someone	*Genital*
Suck a man's penis	*Genital*
Give a woman oral sex	*Genital*
Masturbate over someone	*Genital*
Urinate on someone	*Genital*
Fuck a woman	*Genital*
Fuck a man	*Genital*
None of these things	*Genital*
Response type	*Many of many*

Item: **Genital**	Next item
GP sample Have any of these things happened when you were made to have unwanted sex since you were 16?	
GUM sample Have any of these things happened when you were made to have unwanted sex since you were 16? Remember that your answer is for the most serious (or only) time (the most serious time is the time that affected you the most). You can give more than one answer.	
Got an erection (hard on)	*Injury*
Ejaculated (came)	*Injury*
Neither of these	*Injury*
Response type	*Many of many*

Item: **Injury?**	Next item
GP: Did you ever get any of these things when you were made to have unwanted sex? Remember that your answer is for unwanted sexual experiences since you were 16. You can give more than one answer.	
GUM: Did you get any of these things when you were made to have unwanted sex? Remember that your answer is for the most serious (or only) time you had unwanted sex since you were 16. The most serious time is the time that affected you the most. You can give more than one answer.	
A sexually transmitted disease (VD)	Medhelp?
Some cuts or soreness	Medhelp?
Some cuts and wounds	Medhelp?
Bad bruising	Medhelp?
Bad cuts and bruises	Medhelp?
Broken bone(s)	Medhelp?
Internal injury	Medhelp?
An injury that threatened your life	Medhelp?
None of these things	Told GP
Response type	Many of many

Item: **Medhelp?**	Next item
GP: Did you ever get any sort of medical help after you had been made to have unwanted sex? Remember that your answer is for unwanted sexual experiences since you were 16. You can give more than one answer.	
GUM: Did you ever get any sort of medical help after you had been made to have unwanted sex? Remember that your answer is for the most serious (or only) time you had unwanted sex since you were 16. The most serious time is the time that affected you the most. You can give more than one answer.	
Went to see a doctor	*How soon?*
Went to a casualty or other hospital department	*How soon?*
Went to another medical person or medical place	*How soon?*
Got advice about HIV (from a person qualified to advise you)	*How soon?*
Got first aid from a non-medical person	*How soon?*
No	*NoMedical*
Response type	*Many of many*

Item: **How soon**	Next item
GP: How soon did you get medical help? GUM: How soon did you get medical help? Remember that your answer is for the most serious (or only) time you had unwanted sex since you were 16. The most serious time is the time that affected you the most.	
Within 12 hours	*TellGP*
Within twenty-four hours	*TellGP*

Item: **How soon**	Next item
In the first three days	*TellGP*
Within a week	*TellGP*
Within a month	*TellGP*
Response type	*One of many*

Item: **Told GP?**	Next item
GP Have you ever told your GP (doctor) that you were made to have unwanted sex GUM Have you ever told your GP (doctor) that you were made to have unwanted sex ? Remember that your answer is for the most serious (or only) time you had unwanted sex since you were 16. The most serious time is the time that affected you the most. ?	
Yes	*GP helpful?*
No	*Tell ask?*
Response type	*One of many*

Item: **GP helpful?**	Next item
This question is about the first time (or only time) that you told your GP (doctor). How helpful was your GP (doctor)?	
Your doctor was very helpful	*Other help*
Your doctor was quite helpful	*Other help*
Your doctor was neither helpful nor unhelpful	*Other help*
Your doctor was quite unhelpful	*Other help*
Your doctor was very unhelpful	*Other help*
Response type	*One of many*

Item: **Tell ask?**	Next item
Would you tell your GP (doctor) that you were made to have unwanted sex if he or she asked you about it?	
Yes	*Other help*
No	*Other help*
Not sure	*Other help*

Item: **Tell ask?**	Next item
Response type	*One of many*

Item: **No medical**	Next item
GP: Why have you not told a medical person about this? You can give more than one answer. GUM: Why have you not told a medical person about this? You can give more than one answer. Remember that your answer is for the most serious (or only) time you had unwanted sex since you were 16. The most serious time is the time that affected you the most.	
I did not think it was a medical thing	*Told GP?*
I was too embarrassed	*Told GP?*
I did not think a doctor would believe me	*Told GP?*
A doctor might think it was my fault	*Told GP?*
I did not want my doctor to find out about it	*Told GP?*
I did not think a doctor could help me	*Told GP?*
A doctor might think that I am gay	*Told GP?*
None of these reasons	*Told GP?*
Response type	*Many of many*

Item: **Other help**	Next item
GP: Did you ever go to (or telephone) any of these people or places for help after you were made to have unwanted sex? You can give more than one answer. GUM: Did you ever go to (or telephone) any of these people or places for help after you were made to have unwanted sex? Remember that your answer is for the most serious (or only) time you had unwanted sex since you were 16. The most serious time is the time that affected you the most.	
No	*Tell soon?*
Yes, the Samaritans	*Tell soon?*
Yes, Survivors	*Tell soon?*
Yes, Lifeline	*Tell soon?*

Item: **Other help**	Next item
Yes, Victim Support	*Tell soon?*
Yes, a Rape Crisis Line or Centre	*Tell soon?*
Yes, a representative of a religion	*Tell soon?*
Yes, other person or place	*Tell soon?*
Response type	*Many of many*

Item: **Tellsoon**	Next item
Did you tell any of these people that you had been to have unwanted sex within two weeks of the FIRST (or only) time it happened after you were 16? You can give more than one answer.	
Told no-one	*Tell ever?*
Wife	*Tell ever?*
Lover or sexual partner that you lived with	*Tell ever?*
Lover or sexual partner	*Tell ever?*
Parents(s)	*Tell ever?*
Someone in your family (not parent)	*Tell ever?*
Friend(s)	*Tell ever?*
Care worker\social worker	*Tell ever?*
Counsellor\therapist\psychiatrist\psychologist	*Tell ever?*
Other person	*Tell ever?*
Response type	*Many of many*

Item: **Tell ever?**	Next item
SINCE then have you told any of these people about ANY unwanted sex that you have been made to have since you were 16? You can give more than one answer.	
Told no-one	*Pre-med*
Wife	*Pre-*

Item: **Tell ever?**	Next item
	med
Lover or sexual partner that you lived with	*Pre-med*
Lover or sexual partner	*Pre-med*
Parents(s)	*Pre-med*
Someone in your family (not parent)	*Pre-med*
Friend(s)	*Pre-med*
Care worker\social worker	*Pre-med*
Counsellor\therapist\psychiatrist\psychologist	*Pre-med*
Other person	*Pre-med*
Response type	*Many of many*

Item: **Pre-med**	Next item
Before you were made to have unwanted sex after age sixteen did you have any of these troubles for more than two weeks at any one time. ONLY include troubles you have had SINCE you were 16. You can give more than one answer.	
Frequent nightmares	*Pre-help*
Fear of men	*Pre-help*
A phobia (e.g., a strong fear of going outside)	*Pre-help*
Feelings of anxiety or panic	*Pre-help*
Great difficulty sleeping	*Pre-help*
Feeling very depressed	*Pre-help*
Emotional problems	*Pre-help*
Sexual problems	*Pre-help*
A drug problem	*Pre-help*
None of these things	*Pre-help*
Response type	*Many of*

	many

Item: **Pre-help**[1]	Next item
Did you try to get help for these troubles? You can give more than one answer.	
No	*Post-med*
Yes, you saw a doctor	*Post-med*
Yes, you saw a counsellor or therapist	*Post-med*
Yes, you saw a nurse	*Post-med*
Yes, you saw a social worker	*Post-med*
Yes, you saw a psychiatrist or psychologist	*Post-med*
Yes, you saw somebody else	*Post-med*
Yes, you went to stay in hospital	*Post-med*
Yes a doctor gave you tablets to take	*Post-med*
Response type	*Many of many*

Item: **Post-med**[2]	Next item
SINCE you were made to have unwanted sex the first (or only) time after age 16 have you had any of these troubles for more than two weeks at a time. ONLY include troubles that you have had since you were 16. You can give more than one answer.	
Frequent nightmares	*Post-help*
Fear of men	*Post-help*
A phobia (e.g., a strong fear of going outside)	*Post-help*
Feelings of anxiety or panic	*Post-help*
Great difficulty sleeping	*Post-help*
Feeling very depressed	*Post-help*
Emotional problems	*Post-help*
Sexual problems	*Post-help*
A drug problem	*Post-help*
None of these things	*Post-help*
Response type	*Many*

[1] Note that those not reporting NVS (interview item Med-help) were posed the same question (and given identical response options) to interview item Posthelp above.

[2] Note that those not reporting NVS (interview item: Medical) were asked the following question. Since you were 16 have you had any of these troubles for more than two weeks at a time? You can give more than one answer. The response options were identical to those above.

Item: **Post-med**[2]	Next item
	of many

Item: **Post-help**	Next item
Have you ever tried to get any help for these troubles? You can give more than one answer.	
No	*CAGE*
Yes, you saw a doctor	*CAGE*
Yes, you saw a counsellor or therapist	*CAGE*
Yes, you saw a nurse	*CAGE*
Yes, you saw a social worker	*CAGE*
Yes, you saw a psychiatrist or psychologist	*CAGE*
Yes, you saw somebody else	*CAGE*
Yes, you went to stay in hospital	*CAGE*
Yes a doctor gave you tablets to take	*CAGE*
Response type	*Many of many*

Item: **CAGE**	
We now have some questions about drinking alcohol. You can give more than one answer.	*DSH1*
Have you ever felt you ought to cut down on your drinking?	*DSH1*
Have people ever annoyed you by criticising your drinking?	*DSH1*
Have you ever felt bad or guilty about your drinking	*DSH1*
Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover	*DSH1*
None of these	*DSH1*
Response type	*Many of many*

Item: **DSH1**	Next item
Have you ever DELIBERATLEY done any of these things to hurt yourself? You can give more than one answer.	*DSH2*
None of these things	*DSH2*
Cut yourself with a knife or something else	*DSH2*
Burned yourself with a cigarette or anything else	*DSH2*
Banged your head against a wall or something else	*DSH2*
Other thing to hurt yourself	*DSH2*
Response type	*Many of many*

Item: **DSH2**	Next item
Have you ever tried to take your own life (commit suicide)?	
No	*Police*
Yes, once	*Police*
Yes, twice	*Police*
Yes, three times	*Police*
Yes, four times	*Police*

Item: **DSH2**	Next item
Yes, five times	*Police*
Yes, more than five times	*Police*
Response Type	*One of many*

Item: **Police**	Next item
Were the police told that you had been made to have unwanted sex?	
Yes, you told the police	*Helpful?*
Yes, somebody else told the police	*Helpful?*
No	*Police No*
Response type	*Many of many*

Item: **Helpful?**	Next item
This question is about the FIRST time that the police were told that you had been made to have unwanted sex since age 16. How helpful were the police?	
The police were very helpful	*Caught*
The police were quite helpful	*Caught*
The police were neither helpful nor unhelpful	*Caught*
The police were quite unhelpful	*Caught*
The police were very unhelpful	*Caught*
Response type	*One of many*

Item: **Police No**	Next item
You said it was not reported to the police. Why was this? You can give more than one answer.	
The police don't care	*Sexuality 2*
Too embarrassed to tell the police	*Sexuality 2*
The police would not believe me	*Sexuality 2*
I am gay and the police are not helpful to the gay community	*Sexuality 2*
I did not want to get the person into trouble	*Sexuality 2*
The police might think that I am gay	*Sexuality 2*
Some other reason(s)	*Sexuality 2*
Response type	*Many of many*

Item: **Caught?**	Next item
Have the police caught the person(s) who was first reported for making you have unwanted sex when you were older than 16?	
Yes	*Court*
No	*Court*
Don't know	*Sexuality2*
Response type	One of many

Item: **Court**	Next item
Have you given evidence in court about the person(s) who was first reported for making you have unwanted sex when you were older than 16?	
Yes	*Outcome*
No	*No court*
Response type	*One of many*

Item: **No Court**	Next item
Why have you not given evidence about the first (or only) person(s) who you reported for making you have unwanted sex? You can give more than one answer	
The person(s) pleased guilty	*Sexuality2*
The case is yet to go to court	*Sexuality2*
The charges were dropped	*Sexuality2*
Other reason	*Sexuality2*
Don't know	*Sexuality2*
Response type	*Many of many*

Item: **Outcome**	Next item
This question concerns the first (or only) court case about unwanted sex that you were made to have since age 16. What did the court decide to do with the person(s) who made you have unwanted sex? You can give more than one answer.	
Don't know	*Satisfaction*
The case is still in progress	*Satisfaction*
The person was found Not Guilty	*Satisfaction*
The person received a fine	*Satisfaction*
The person was put on probation	*Satisfaction*
The person received a suspended sentence	*Satisfaction*
The person was sent to prison	*Satisfaction*
None of these things	*Satisfaction*
Response type	*Many of many*

Item: **Satisfaction**	Next item
How satisfied are you with what the court decided?	
Very satisfied	Sexuality2
Satisfied	Sexuality2
Neither satisfied not dissatisfied	Sexuality2
Dissatisfied	Sexuality2
Very dissatisfied	Sexuality2
Response type	Sexuality2

Item: **Sexuality2**	Next item
Up until the first (or only time) you were made to have unwanted sex since you were 16 were you:	
Gay (homosexual)	*Confused?*
Gay, but sometimes fantasised about sex with women	*Confused?*
Gay, but sometimes had sex with women	*Confused?*
Bisexual	*Confused?*
Straight, but sometimes had sex with men	*Confused?*
Straight (but sometimes fantasised about sex with men	*Confused?*
Straight (heterosexual)	*Confused?*
Response type	*One of many*

Item: **Confused**	Next item
Since you were made to have unwanted sex the first (or only time) since you were 16 have ever been unsure about whether you are Gay (homosexual), straight (heterosexual), or bisexual?	
Yes	*Child*
No	*Child*
Don't know	*Child*
Response type	*One of many*

Item: **Child**	Next item
Thank you very much for answering the questions so far. The information that you have provided is very useful. We would now like to ask you about sexual experiences that you may have had BEFORE YOU WERE SIXTEEN. Please press the arrow to go on.	*CSA*
Response type	*(participant presses → key)*

Item: **CSA**	Next item
Before you were 16 did you have any UNWANTED sexual experiences? Unwanted sexual experiences are when A person(s) uses force –or other means– so that they can do sexual things to you that you did not want them to do A person uses force – or other means– to make you do a sexual thing that you did NOT want to do These things can be done by men and also by women.	

Item: **CSA**	Next item
Has anything like this happened to you SINCE YOU WERE 16?	
Yes	*CSA#*
No	*Assent*
Response type	*One of many*

Item: **TimesN**	Next item
On how many DIFFERENT OCCASIONS were you made to have unwanted sex BEFORE you were 16?	
Once	*CSA gender*
Less than five times	*Same*
Between five and ten times	*Same*
Between eleven and twenty times	*Same*
More than twenty times	*Same*
Response type	*One of many*

Item: **CSA same**	Next item
Was it the same person who made you have unwanted sex all these times?	
Yes	*CSA period*
No	*CSA period*
Response type	*One of many*

Item: **CSA period**	Next item
Over how long a time period were you made to have unwanted sex?	
One week	*CSA gender*
One month	*CSA gender*
Two to three months	*CSA gender*
Four to six months	*CSA gender*
Seven to twelve months	*CSA gender*
More than one year	*CSA gender*
More than two years	*CSA gender*
Response type	*One of many*

Item: **CSA gender**	Next item
How many people made you have unwanted sex?	
One boy or man	*CSA who?*
More than one boy or man	*CSA who?*
One girl or woman	*CSA who?*
More than one girl or woman	*CSA who?*

Item: **CSA gender**	Next item
A boy or man and a girl or woman	*CSA who?*
A group of people including boys or men and girls or women	*CSA who?*
Response type	*One of many*

Item: **CSA who?**	Next item
Before you were 16 did any of these people make you have unwanted sex? You can give more than one answer.	
Relative(s)	*CSA relative*
Person not in this list	*CSA age*
Teacher or someone else working at school	*CSA age*
Schoolboy/schoolgirl	*CSA age*
Someone your father was going out with	*CSA age*
Someone your mother was going out with	*CSA age*
Baby-sitter	*CSA age*
Care worker	*CSA age*
Neighbour	*CSA age*
Friend of the family	*CSA age*
Response type	*Many of many*

Item: **CSA relative**	Next item
Before you were 16 did any of these relatives make you have unwanted sex? You can give more than one answer.	
Father	*CSA age*
Step-father	*CSA age*
Mother	*CSA age*
Step-mother	*CSA age*
Brother	*CSA age*
Step-brother	*CSA age*
Sister	*CSA age*
Uncle	*CSA age*
Grandfather	*CSA age*
Other relative	*CSA age*
Response type	*Many of many*

Item: **CSA age**	Next item
How old were you when this happened the first (or only) time?	*Genital2*
Response type	*Participants enters number (only numbers below 16 accepted)*

Item: **Genital2**	Next item
Sometimes boys get an erection (hard-on) or ejaculate (come) when they are made to have unwanted sex. Did any of these happen to you? You can give more than one answer.	
Neither of these	*CSACoer1*
Erection (hard-on)	*CSACoer1*
Ejaculated (came)	*CSACoer1*
Response type	*Many of many*

Item: **CSACoer1**	Next item
Before you were 16 did any person who made you have unwanted sex do ANY of these things? You can give more than one answer.	
Persuaded you to do it	*CSACoer2*
Said it was a good thing or the right thing to do	*CSACoer2*
Said they would do it with someone else if you did not do it	*CSACoer2*
Said they would tell others about it if you did not do it	*CSACoer2*
Said they would hurt a pet or other animal if you did not do it	*CSACoer2*
Said they would break or smash things if you did not do it	*CSACoer2*
Blackmailed you	*CSACoer2*
Drugged you	*CSACoer2*
None of these things	*CSACoer2*
Response type	*Many of many*

Item: **CSACoer2**	Next item
Before you were sixteen did any person who made you have unwanted sex do ANY of these things? You can give more than one answer.	
Said insulting things	*SexActs3*
Said they would hurt you	*SexActs3*
Said they would kill you	*SexActs3*
Slapped, pushed or handled you roughly	*SexActs3*
Beat, punched or kicked you	*SexActs3*
Tied you up or gagged you	*SexActs3*
Threatened you with a weapon	*SexActs3*
Hurt you with a weapon	*SexActs3*
None of these things	*SexActs3*
Response type	*Many of many*

Item: **SexActs3**	Next item
Before you were 16 did any of these things happen when you were made to have unwanted sex? You can give more than one answer.	
Your genitals were touched	*SexActs4*
You were masturbated	*SexActs4*
Your penis was sucked	*SexActs4*
A man urinated (pissed) on you	*SexActs4*

Item: **SexActs3**	Next item
You were raped anally	*SexActs4*
A person took sex photo's of you	*SexActs4*
None of these things	*SexActs4*
Response type	*Many of many*

Item: **SexActs4**	Next item
Before you were 16 did you have to do any of these things when you were made to have unwanted sex? You can give more than one answer.	
Masturbate (wank) someone	*CSA month*
Suck a man's penis	*CSA month*
Give a woman oral sex	*CSA month*
Touch a person's genitals	*CSA month*
Masturbate (wank) over someone	*CSA month*
Fuck a man	*CSA month*
Fuck a woman	*CSA month*
None of these things	*CSA month*
Response type	*Many of many*

Item: **CSA month**	Next item
Did you tell any of these people that you had been made to have unwanted sex WITHIN ONE MONTH of the FIRST (or only) time that it happened? You can give more than one answer.	
One (or both) of your parents	*CSA ever*
Other members(s) of your family	*CSA ever*
Person you were going out with	*CSA ever*
Friend	*CSA ever*
Teacher or other person who worked at school	*CSA ever*
Care worker or social worker	*CSA ever*
Counsellor/therapist/psychiatrist/psychologist	*CSA ever*
Police	*CSA*

Item: **CSA month**	Next item
	ever
Other person	*CSA ever*
Did not tell anybody	*CSA ever*
Response type	*Many of many*

Item: **CSA ever**	Next item
SINCE then have you told any of these people about this (or any other) unwanted sex that you were made to have before you were 16. You can give more than one answer.	
One (or both) of your parents	*CSA police*
Other members(s) of your family	*CSA police*
Person you were going out with	*CSA police*
Wife/ex-wife	*CSA police*
Lover or sexual partner	*CSA police*
Care worker or social worker	*CSA police*
Counsellor/therapist/psychiatrist/psychologist	*CSA police*
Police	*CSA police*
Other person	*CSA police*
Have not told anybody	*CSA police*
Response type	*Many of many*

Item: **CSA police**	Next item
Were the police EVER told that you had been made to have unwanted sex?	
Yes, you told the police	CSA court
Yes, somebody else told the police	CSA Court
No	Assent
Response type	One of many

Item: **CSA court**	Next item
Did you give evidence in court about when you were made to have unwanted sex?	
Yes	*Assent*
No	*Assent*
Response type	*One of many*

Item: **Assent**	Next item
Sometimes people under 16 choose to do sexual things with other people. Before you were 16 did you ever DO any sexual things that you WANTED TO DO with a person who was FIVE OR MORE years older than you?	
Yes	*Symptoms*
No	*ASE age*
Response type	*One of many*

Item: **ASE Age**	Next item
You said that you willingly did sexual things with a person who was five or more years older than you. How old were you when you FIRST did sexual things with this person?	
Participant enters age	*ASE who?*

Item: **ASE who?**	Next item
Who did you do these sexual things with? You can give more than one answer.	
Relative(s)	*ASE family*
Other person	*ASE family*
Teacher or someone else who worked at school	*ASE family*
Someone you were going out with	*ASE family*
Schoolboy or schoolgirl	*ASE family*
Friend of the family	*ASE family*
Baby-sitter	*ASE family*
Care worker	*ASE family*
Someone your father was going out with or living with	*ASE family*
Someone your mother was going out with out or living with	*ASE family*
Response type	*Many of many*

Item: **ASE family**	Next item
Which relative(s) did you have wanted sex with? You can give more than one answer.	
Father	*ASE gender*
Step-father	*ASE gender*
Mother	*ASE gender*
Step-mother	*ASE gender*
Brother	*ASE gender*
Sister	*ASE gender*
Uncle	*ASE gender*
Aunt	*ASE gender*
Cousin	*ASE gender*
Other relative	*ASE gender*
Response type	*ASE gender*

Item: **Gender**	Next item
What sex was the person that you did sexual things with?	
Male	*ASE sex acts*
Female	*ASE sex acts*
Male and female	*ASE sex acts*
Response type	*Many of many*

Item: **ASE sex acts**	Next item
What sexual things did you DO that you WANTED to with this person(s) who was five or more years older before you were sixteen? You can give more than one answer.	
Let someone touch your genitals	*Symptoms*
Touch someone else's genitals	*Symptoms*
Have oral sex with a boy or man	*Symptoms*
Have oral sex with a girl or woman	*Symptoms*
Fuck a boy or man	*Symptoms*
Let a boy or man fuck you	*Symptoms*
Fuck a girl or woman	*Symptoms*
Do sexual things with more than one person at the same time	*Symptoms*
Have sex photo's taken	*Symptoms*
None of these things	*Symptoms*
Response type	*Many of many*

Item: **Symptoms**	Next item
Before you were 16 did you have any of these troubles for more than two weeks at any one time? You can give more than one answer.	
Frequent nightmares	Child help
Fear of men	Child help
A phobia (e.g. a strong fear of going outside)	Child help
Feelings of anxiety or panic	Child help
Great difficulty sleeping	Child help
Feeling very depressed	Child help
Emotional problems	Child help
Bedwetting	Child help
None of these things	Child help
Response type	Child help

Item: **Child help**	Next item
Did any of these people try to give help for these troubles? You can give more than one answer.	
No	*End*
Yes, a doctor	*End*
Yes, a counsellor/therapist	*End*
Yes, a nurse	*End*
Yes, a social worker	*End*
Yes, a psychiatrist or psychologist	*End*
Yes, somebody else	*End*
Yes, you went to stay in hospital	*End*
Yes a doctor gave you tablets to take	*End*
Response type	*Many of many*

Item: **End**	Next item
This is the end. Thank you VERY MUCH for your time. Please press the button marked END and tell the researcher that you have finished.	
Response type	*Participant presses button marked END*

Appendix 4 Information sheet presented to potential participants

Royal Free Hospital School of Medicine
University of London

Rowland Hill Street, London, NW3 2PF
Tel: 0207 794 0500

Medical Research

Men and their sexual experiences

We would be grateful if you could give some of your time to help us in this medical research. A computer will present questions about unwanted and wanted sexual experiences and record your responses. Please ask the researcher for more details.

This research is voluntary (you do *not* have to take part), anonymous and confidential

Appendix 5 Participant information sheet provided after completion of the interview

Thank you very much for taking part in this research. The information you have provided is very helpful.

If you, or someone you know, needs help or support regarding unwanted sexual experiences the following can provide help:

- General Practitioner (family doctor)
- The Samaritans
- Rape Crisis line (see the Yellow Pages for your local service)
- SURVIVORS (an organisation that helps men who have had unwanted sexual experiences: Telephone 0845 122 1201)

If you would like further information about this research please contact:

Professor King
Department 04
Royal Free Hospital Medical School
Rowland Hill Street
London
NW3 2PF

Appendix 6 Publications arising from this research

Articles

King, MB, Coxell, A and Mezey, G (2002). Sexual molestation of males: Associations with psychological disturbance. British Journal of Psychiatry, 181, 153-157.

Coxell, AW, King, MB, Mezey, GC and Kell, P (2000). Sexual molestation of men: Interviews with 224 men attending a genitourinary medicine service. International Journal of STD and AIDS.

Coxell, AW, King, MB, Mezey, GC and Gordon, D (1999). Lifetime prevalence, characteristics, and associated problems of non-consensual sex in men: a cross sectional survey. British Medical Journal, 318, 846-850.

Coxell, AW and King, MB (1996) Male victims of rape and sexual abuse, *Sexual and Marital Therapy, 11*, 3, 297-308.

Book chapters

Coxell, AW and King, MB (2002). Gender, sexual orientation and sexual assault. In J Petrak and B Hedge (Eds). The trauma of sexual assault. Wiley: Chichester. (45-68).

King, MB Coxell, AW and Mezey, G (2000). The prevalence and characteristics of male sexual assault. In GC Mezey and MB King 'Male victims of Sexual Assault'. Oxford: OUP (1-15).

Coxell, AW and King, MB (2000) 'Behind locked doors: Sexual assault of men in custodial environments'. The prevalence and characteristics of male sexual assault. In GC Mezey and MB King 'Male victims of Sexual Assault'. Oxford: OUP (79-95).